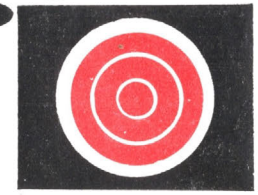
sporting and hunting weapons and cartridges

V/O "R A Z N O E X P O R T"

USSR

MOSCOW

sporting and hunting weapons and cartridges



CATALOGUE

Introduction

The Soviet Union possesses limitless possibilities for the development of hunting and sport shooting. By its tremendous diversified hunting grounds and the abundance of fair game the Soviet Union has no equal.

Every year Soviet hunters shoot a great number of small and large animals providing valuable furs and raw materials.

Soviet furs have been known for years for their high quality and there is a constant demand for them on the international and internal markets. Alongside with hunting, sport shooting enjoys great popularity. Hundreds of thousands of sportsmen go in for this kind of sport.

To meet various demands of hunters and sportsmen many designing offices and gun factories are engaged in designing, testing and manufacturing modern types of shotguns and sporting rifles as well as ammunition.

A constant demand for shotguns and sporting rifles within the country and abroad has been regularly satisfied for many years due to the mass series production by gun factories. Some years the output of shotguns and rifles amounted to several hundreds of thousands a year. At present the production is continuously growing. Large-scale series production of hunting and sporting firearms and ammunition made it possible to work out excellent designs and technology of each model as well as to educate highly skilled designers, engineers and workers.

During the Great Patriotic War of 1941—1945 the designing and production of new models of sporting and hunting weapons were temporarily ceased but immediately after the termination of the war the rehabilitation of this branch of industry began together with the restoration of the entire national economy at a much higher stage of development.

A broad conference of designers, manufacturers, professional hunters and sportsmen held in 1946 mapped out some very important organizational and technical measures providing for the development of production of sporting and hunting firearms on a new basis with due consideration of the latest achievements in the field of technology.

Similar conferences held in 1960, 1961 and 1962 made their contribution to the improvement of sporting and hunting weapons and ammunition.

Among these measures worthy of mention are: organization of armoury schools to train highly qualified workers and foremen; setting up of specialized design and research offices as well as special design groups at armament factories; organization of special shops for small-scale production of hand-made guns; establishment of State Inspection to check the quality of shotguns, rifles and ammunition.

In view of the growing demands of hunters and sportsmen the design offices and gun factories of the Soviet Union

produced a considerable number of new modern models of hunting and sporting firearms and ammunition. It is characteristic that new synthetic materials belonging to a group of poliamide plastics are ever more widely used for the construction of shotguns and rifles. The possibility of creating synthetic materials (plastics) possessing a predetermined combination of physical and technical properties enables the armourers to construct unparalleled weapons having the best traditional forms.

The parts and units of firearms which are made of plastics are noted for their accuracy of size, elegant appearance, long service life, good resistance to corrosion, lighter weight as compared with metal and even wood and high moisture resistance. The plastic parts used in automatic mechanisms (in repeating and automatic rifles) have high coefficient of friction and easily run in with mating parts. The employment of plastics instead of wood for making stocks ensured a more precise fitting of the barrel, which served to improve the fire accuracy of rifled weapons. These qualities together with moisture resistance and absence of misalignment when affected by moisture make the advantages of plastic stocks quite evident.

Shotguns manufactured by the armourers of Tula and Izhevsk have been famous for many years in the Soviet Union and abroad. At present they produce modern guns of exceptional qualities.

The new models of repeating, magazine, combination and double-barrel guns as well as target pistols and high-quality rifles are famous for their original design, good fire accuracy, high ballistic and service characteristics, safety in handling and pleasant appearance.

These models are extremely popular among hunters and sportsmen both in the Soviet Union and abroad.

The shotguns and sporting rifles which were a great success at many international exhibitions are exported to many countries of the world.

Soviet firearms are manufactured by means of the most modern machine-tools ensuring high precision of finish.

Barrels and other important parts are made of special high-quality grades of steel.

The main part — the receiver is made in some models of a high-grade light alloy.

The stock and forearm are manufactured of the select grades of well-seasoned specially-treated walnut, beech or birch.

Along with firearms new systems of air, spring-type and gas-cylinder rifles are designed, the use of such weapons making the preliminary training of shooters much cheaper.

The Soviet Union produces large quantities of various types of rifle and shotgun ammunition. The ammunition is manufactured with the help of modern equipment and automatic lines ensuring precise dosing of percussion compounds and powder charges to obtain uniform characteristics of cartridges and shotgun shells.

Soviet shotgun ammunition always finds a ready market abroad.

Sportsmen of the USSR repeatedly established new records at international contests using Soviet sporting rifles and ammunition.

Each new experimental model of a weapon or ammunition, prior to being put into series production, undergoes a complete State test. With this aim in view a special State experimental center was set up to test and check the quality of all shotguns, sporting weapons and ammunition designed and produced by design offices and gun factories.

The purpose of these tests is to determine the basic linear, weight, ballistic, strength, and service characteristics and their conformity with the established requirements.

Special attention is paid to the safety in handling the weapon and reliability of its operation in various difficult conditions (when dirty, excessively cooled or heated, and other uncommon climatic conditions).

The weapons or ammunition are by no means put into series production unless they have passed the tests.

Each sample finally accepted for service bears respective stamps and inscriptions testifying that it has passed established tests.

The test data and the meaning of stamps and inscriptions are listed in the Certificate or Service Log attached to each weapon.

The appearance of a large number of newly-made modified models of weapons and new brands of ammunition necessitated the publication of the present Catalogue for the information of a large circle of hunters and sportsmen.

This Catalogue may also prove to be useful in gun-making industry, design offices, educational establishments, selling and other organizations.

The Catalogue contains information pertaining chiefly to new models which passed the State test and are now produced by the Soviet industry.

The information is presented in the Catalogue in accordance with the usual classification of hunting and sporting firearms and ammunition.

Correspondingly the Catalogue contains the following chapters:

Introduction
Hunting Firearms
Sporting Weapons
Hunting Cartridges
Sporting Cartridges
Storage and Handling Instructions

Each chapter begins with the introductory part giving general information concerning barrel boring, the size of chamber, fire accuracy, coating of barrel and other gun parts as well as other characteristics which give a general idea of the state and development of production of a given group of weapons or ammunition.

It should be borne in mind that weight, linear and other characteristics of certain models of firearms and ammunition may vary to either side within slight limits as some characteristics are perfected in the course of production.

HUNTING FIREARMS

The present chapter of the Catalogue contains information on hunting firearms produced by the Soviet industry.

All models of hunting firearms depending on their construction are classified into smooth-bore, rifled and combination weapons.

Smooth-Bore Shotguns

The smooth-bore firearms include single- and double-barrel shotguns the barrels of which are not rifled.

Smooth-bore firearms are used for shooting small and medium-size animals and birds.

Firing from shotguns is delivered as a rule at small ranges up to 35—50 *m* mostly with cartridges filled with shot.

This weapon is used less frequently for hunting large animals; however, when used for this purpose it fires cartridges with lead bullets having a much greater stopping and killing effect than shot.

Single-barrel shotguns include: single-shot, magazine and repeating models.

Magazine and repeating shotguns (models **МЦ**20, **МЦ**21) are new models which were produced in the Soviet Union only a short time ago. The production of these weapons is not fully developed yet.

Single-barrel one-shot guns which began to be produced much earlier are extremely widespread; recently they have been modified to improve their service characteristics and outward appearance. This group of weapons includes such models as **ИЖ**-17, **ИЖ**-18 and others.

Double-barrel shotguns may be with side-by-side and over-and-under barrels. This group includes some new models: **ИЖ**-12, **МЦ**10, **ТОЗ**-25 and others. They were manufactured in the Soviet Union in the past few years. Now their production is getting well under way.

Together with the newest models of double-barrel shotguns the present chapter of the Catalogue lists such models which were designed and produced in the Soviet Union rather a long time ago but which up to this time enjoy great popularity and demand on the internal and foreign markets. These models are **ИЖ**-58, **ИЖ**-54, **БМ**, etc.

All Soviet-made smooth-bore shotguns are produced with universal chambers 70 *mm* long, their diameter ensuring the use of cartridges with paper or metal shells.

The barrels of double-barrel shotguns in serial production have standard chokes. As a rule, the right-hand (lower) barrel has 0.5-*mm* tapering (half-choke), while the left-hand (upper) barrel has 0.75—1.0-*mm* tapering (choke).

The bores of single-barrel shotguns are usually provided with a slight taper.

Shotguns with greater non-standard chokes are made to order.

To prevent corrosion the bores and chambers are chrome plated. In some models of shotguns the bores and chambers are not chrome-plated.

The outer surfaces of shotguns are blackened with alkaline or non-alkaline oxidizing or varnished.

The parts of firing mechanisms are also given protective coating using various methods.

Rifled Weapons

Hunting rifled weapons include single- and double-barrel guns, rifles and carbines whose bores are provided as a rule with four or six rifling grooves.

The ammunition used for firing from rifled weapons are central or rim-fire cartridges with lead, soft-nosed or solid bullets.

The single-barrel rifled weapons include single-shot, magazine and repeating rifles and carbines, while the double-barrel weapons are usually guns with side-by-side or over-and-under barrels.

As distinct from smooth-bore guns rifled weapons have the advantage of being capable of firing at longer ranges about 100—300 *m* and sometimes more. When telescopic sights are used, the accuracy of rifled weapons grows to a great extent.

In the past few years Soviet gun-makers designed and produced new models of hunting rifled weapons firing cartridges with soft-nosed bullets. These weapons such as „Барс-1", „Лось", „Медведь" and others are especially effective for hunting medium and large wild animals.

Alongside with this the Soviet Union produces great quantities of rifled models firing 5.6-*mm* rim fire cartridges for professional hunting of small fur animals. Due to their simplicity of design and reliability in operation these weapons enjoy wide popularity among hunters and they are in permanent demand on internal and international markets. These weapons include ТОЗ-16, ТОЗ-17, ТОЗ-18 and ТОЗ-21 models.

Combination Guns

Combination guns are such models which combine one rifled and one or two smooth-bore barrels. This weapon incorporates the positive features of both smooth-bore and rifled firearms.

Combination guns are classified into double-barrel and three-barrel guns.

Double-barrel combination guns such as МЦ5, ИЖ-56-3 „Белка", МЦ29 may have two single-shot barrels or one single-shot and one auto-loading barrel.

Three-barrel combination guns include weapons with three single-shot barrels — model ТОЗ-28, or with two single-shot and one auto-loading barrels — model МЦ30-20.

Due to their specific features (weight and complex design) combination guns are not widespread and produced in far smaller quantities as compared with ordinary shotguns and rifles. This is especially true of three-barrel guns which are hand-made.

Depending on the quality of finish and the method of production hunting firearms are divided into serial production and hand-made models.

Serial production models include inexpensive single- and double-barrel shotguns, rifles and carbines to meet all tastes. They are simple in construction, reliable in operation and have inexpensive but elegant machine-made en-

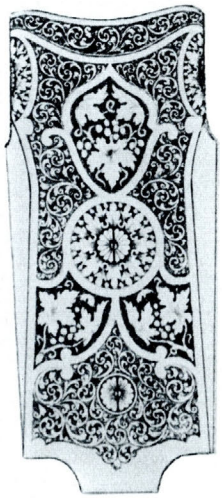
graving. Such weapons are made in great quantities for the internal and foreign markets.

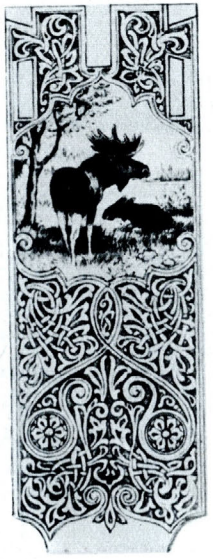
As a rule serial production models have a non-automatic safety, therefore the shotgun is always ready for firing which is especially important for shooting at suddenly appearing targets. However, there are some models which are produced with an automatic safety.

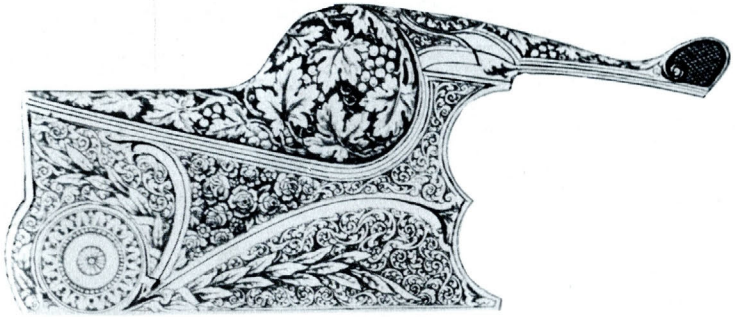
The stocks of serial production models are made principally of beech or birch.

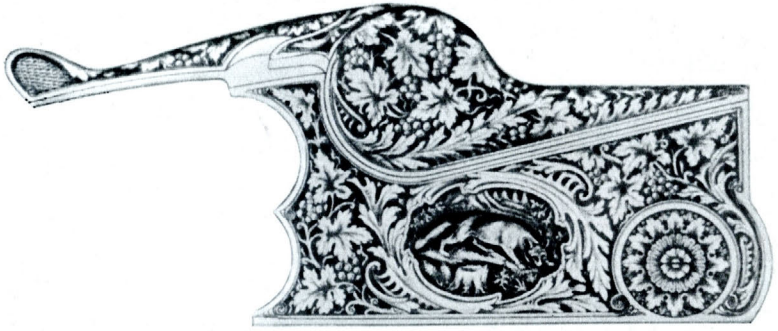
High-priced guns of extra class are usually hand-made. These guns include double-barrel shotguns ИЖ-54, МЦ10; combination guns МЦ5, МЦ30, ТОЗ-28 and others. On request from the customer any model of weapon may be hand-made. In hand-made guns all the units and parts are thoroughly fitted and adjusted, the receiver, barrel and stock have expensive elaborate finish and engraving. Guns are ornamented by means of engraving, embossing, gold- or silver-plating, plating with some metals, carving or inlaying.

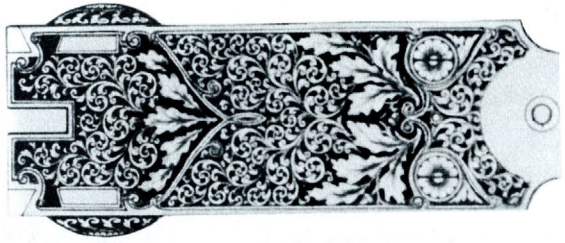
Stocks of hand-made guns are made of select grades of walnut or beech, the size and shape of the stock being made to order. Therefore the manufacture of hand-made guns is a more time-consuming process.

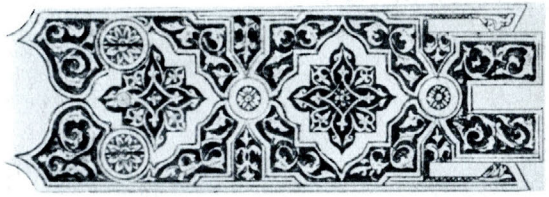




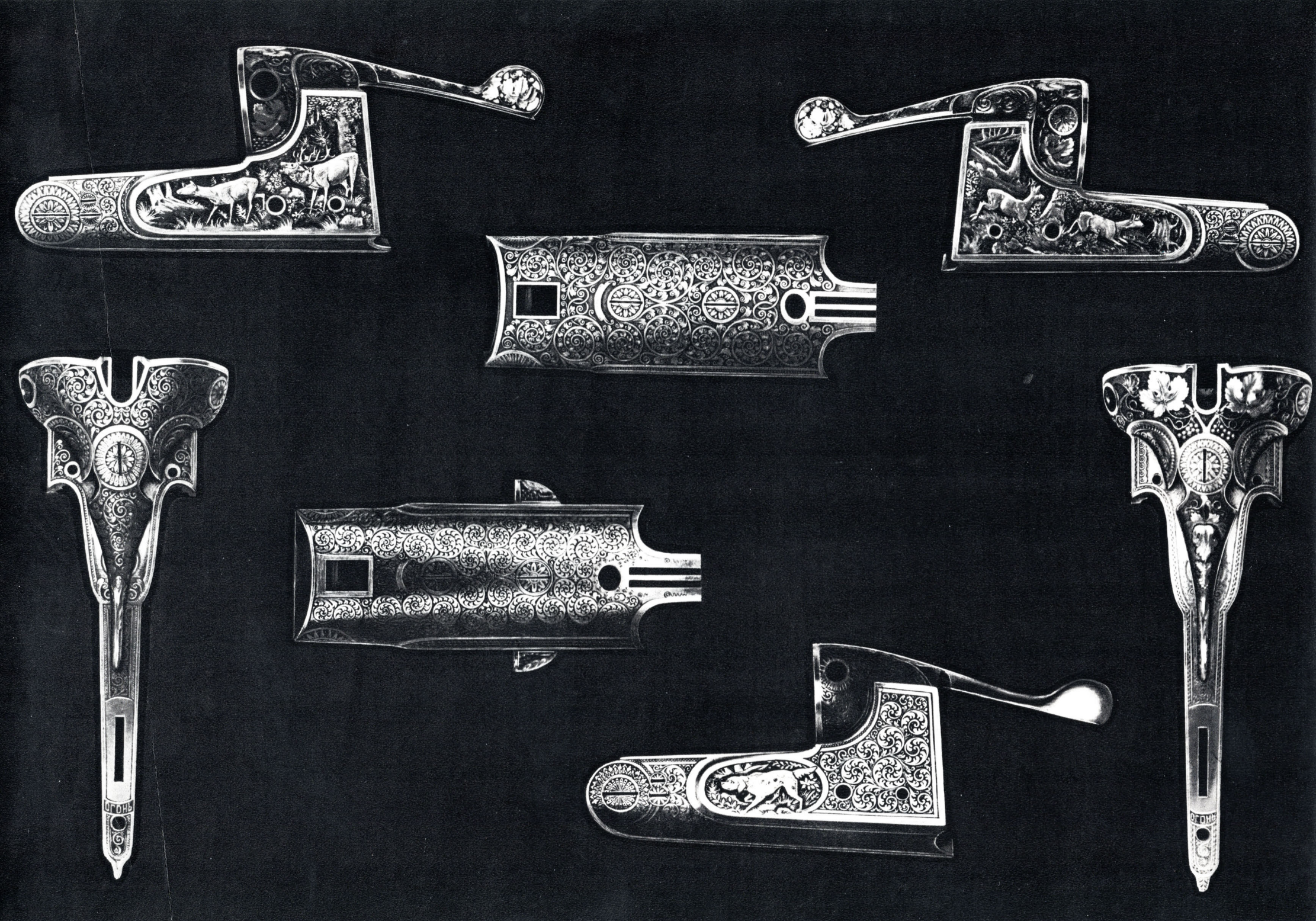








Smooth-Bore Shotguns


ОГОНЬ
ОГОНЬ

The ИЖ-17 shotgun was constructed on the basis of the ИЖК model. It belongs to the category of widely used weapons and is designed for professional and sport hunting.

The shotgun fires cartridges in paper or metal shells.

The barrel and forearm are made detachable. The bore and chamber are chrome-plated.

The barrel bore has a slight taper.

The barrel is locked by means of a hinged lever and the barrel hook.

The outside rebounding hammer has a safety which prevents a shot from being fired while the barrel is unlocked; with the hammer cocked, the shotgun barrel cannot be opened.

The hammer and striker are made as two separate pieces. The trigger pull is within 1.5—2.5 *kg*.

To start the cartridge shell out of the chamber in opening the barrel provision is made for an ejector.

All the metal parts of the shotgun are blackened. The receiver side plates are adorned with machine-made engraving.

The half-pistol stock is made of birch or beech.

The shotgun is in serial production in 12, 16, 20, 28 and 32 gauges.

Shotgun weight, *kg*:

12 gauge — 2.7 with 730-*mm* barrel
16 gauge — 2.6 with 730-*mm* barrel
20 gauge — 2.6 with 675-*mm* barrel
28 gauge — 2.5 with 675-*mm* barrel
32 gauge — 2.4 with 675-*mm* barrel

This shotgun model is simple in design and reliable in operation in any climatic conditions.

When hand-made, the shotgun has a higher fire accuracy, improved finish of parts and more elaborate engraving. All mechanisms are more thoroughly adjusted. The stock is made of either walnut or beech.

SINGLE-BARREL
SHOTGUN

ИЖ-17

The ИЖ-18 shotgun was constructed on the basis of the ИЖКБ model. It belongs to the category of widely used weapons and is designed for professional and sport hunting.

The shotgun fires cartridges in paper or metal shells.

The barrel is detachable and has a slight taper.

The shotgun bore and chamber are chrome-plated. The gun has single locking by means of the locking lever.

On opening the shotgun by the locking lever the cartridge shell is given a preliminary push and the hammer is cocked.

The firing mechanism is housed in the receiver. The striker and hammer are made as two separate pieces.

The cocking indicator is mounted on the top of the receiver.

The shotgun is provided with a non-automatic safety locking the trigger. The safety prevents the shotgun from being fired while the barrel is unlocked.

The pistol stock is made of beech or birch.

The shotgun is in serial production in 12, 16, 20, 28 and 32 gauges.

Weight of shotgun, *kg*:

12 gauge — 2.7 with 730-*mm* barrel
16 gauge — 2.6 with 730-*mm* barrel
20 gauge — 2.6 with 675-*mm* barrel
28 gauge — 2.5 with 675-*mm* barrel
32 gauge — 2.4 with 675-*mm* barrel

When hand-made, the shotgun has a higher fire accuracy, improved finish of parts and more elaborate engraving. All mechanisms are more thoroughly adjusted. The stock is made of walnut or beech.

SINGLE-BARREL
SHOTGUN

ИЖ-18

The shotgun is designed for professional hunting.

The fixed barrel is provided with a standard choke.

The slide action is locked on turning.

The shotgun fires shotgun cartridges in paper or metal shells.

The magazine houses two cartridges, one cartridge remaining in the chamber.

To reduce the probability of accidental shots provision is made for non-automatic safety locking the sear.

The trigger and safety mechanisms are mounted on separate base plates. The trigger pull is within 1.5—2.0 *kg*.

The firing mechanism is fitted in the action.

The striker is cocked on opening the barrel bore.

The stock is of a pistol type with or without a cheek-piece.

The characteristic feature of this model is that it may be made in two variants: the stock, receiver, forearm and trigger guard may be made of plastic or the stock and forearm are manufactured of birch or beech and the remaining parts are metal.

The shotgun is produced in 16 and 20 gauges.

Shotgun weight, *kg*:

16 gauge — 2.2—2.4 with 675-*mm* barrel

20 gauge — 2.2—2.4 with 600-*mm* barrel

The advantages of plastic parts are: smaller weight, precision of size, high resistance to wear and accidental mechanical damage.

The shotgun is simple in construction, reliable in operation and is capable of high rate of fire.

SINGLE-BARREL
MAGAZINE SHOTGUN

МЦ 20

REPEATING SHOTGUN

The МЦ21 shotgun is designed for professional and sport hunting.

The shotgun fires standard cartridges with paper shells.

The automatic mechanism operates by utilizing the barrel recoil caused by the pressure of powder gases.

A movable detachable barrel has a choke ensuring at least 65% fire accuracy.

The barrel is locked by the slide action with a vertically-moving block.

The inner hammer is cocked on shifting the barrel and action to the rearward position.

To prevent accidental firing provision is made for a safety.

The trigger pull is within 2.2—2.6 *kg*.

The tubular magazine holding four cartridges is housed in the forearm. Cartridges are fed from the receiver box into the chamber automatically when reloading the shotgun.

МЦ 21

Fired cartridge shells are removed from the chamber by the extractor and are ejected outside while the barrel is moving to the frontmost position.

The pistol stock is made of walnut with or without cheek-piece. The detachable forearm is also made of walnut. The outer surface of the receiver is adorned with elegant engraving.

The shotgun is manufactured in 12, 16 and 20 gauges.

Shotgun weight, *kg*:

12 gauge — 3.2—3.4 with 750-*mm* barrel
16 gauge — 3.0—3.2 with 720-*mm* barrel
20 gauge — 2.8—3.0 with 675-*mm* barrel

The shotgun has stylish appearance, high practical rate of fire and good ballistic properties. It is reliable in operation and enjoys great popularity among hunters.

The shotgun is designed for professional and sport hunting.

The gun fires cartridges in paper or metal shells.

Two side-by-side barrels are detachable. The bore of the right-hand barrel is slightly tapered, the left-hand barrel has half-choke. The receiver is connected with the barrels and the barrels are locked by means of barrel hooks, hinge pin, forearm, transverse pin and locking frame. The barrels are oxidized with alkali-free compound.

The parts of the trigger and firing mechanisms are mounted on separate base plates. The hammers are installed outside. The firing springs are compressed when hammers are cocked manually.

Cartridge shells are ejected outside by the extractor on opening the barrels.

The receiver and the base plates of the firing mechanisms are oxidized and decorated with simple engraving.

The stock is made of beech and has half-pistol, pistol or straight grip, without cheek-piece.

The forearm is detachable with a lever lock.

The shotgun is in serial production and hand-made 16 and 20 gauges with barrels 700—725 *mm* long.

The weight of the shotgun is 2.75—3.25 *kg*.

When hand-made, the BM shotguns are adorned with more exquisite engraving, have higher fire accuracy and more thorough finish of all units and parts.

The stock and forearm of hand-made shotguns are made of the best grades of walnut.

БМ

DOUBLE-BARREL SHOTGUN

The shotgun is a quantity production model, 12, 16 gauges designed for professional and sport hunting.

The barrels are detachable and placed side-by-side. The bores have standard chokes ensuring high accuracy of fire.

The shotgun fires cartridges with paper or metal shells.

The barrels are locked by means of barrel hooks, hinge pin, forearm latch, transverse pin and locking frame.

The firing and trigger mechanisms with inner hammers are housed in the receiver closed on the right and left by removable wooden cheek plates which are fastened by a cross bolt, the construction ensuring easy inspection and lubrication of the mechanisms.

The trigger pull is within 1.7—2.2 *kg*.

To prevent accidental firing provision is made for a non-automatic safety locking the sear.

On the top part of the receiver on both sides of the locking lever there are cocking indicators.

The stock is connected to the receiver by means of a band and stock screw.

The stock, forearm and cheek plates are made of walnut or plastics.

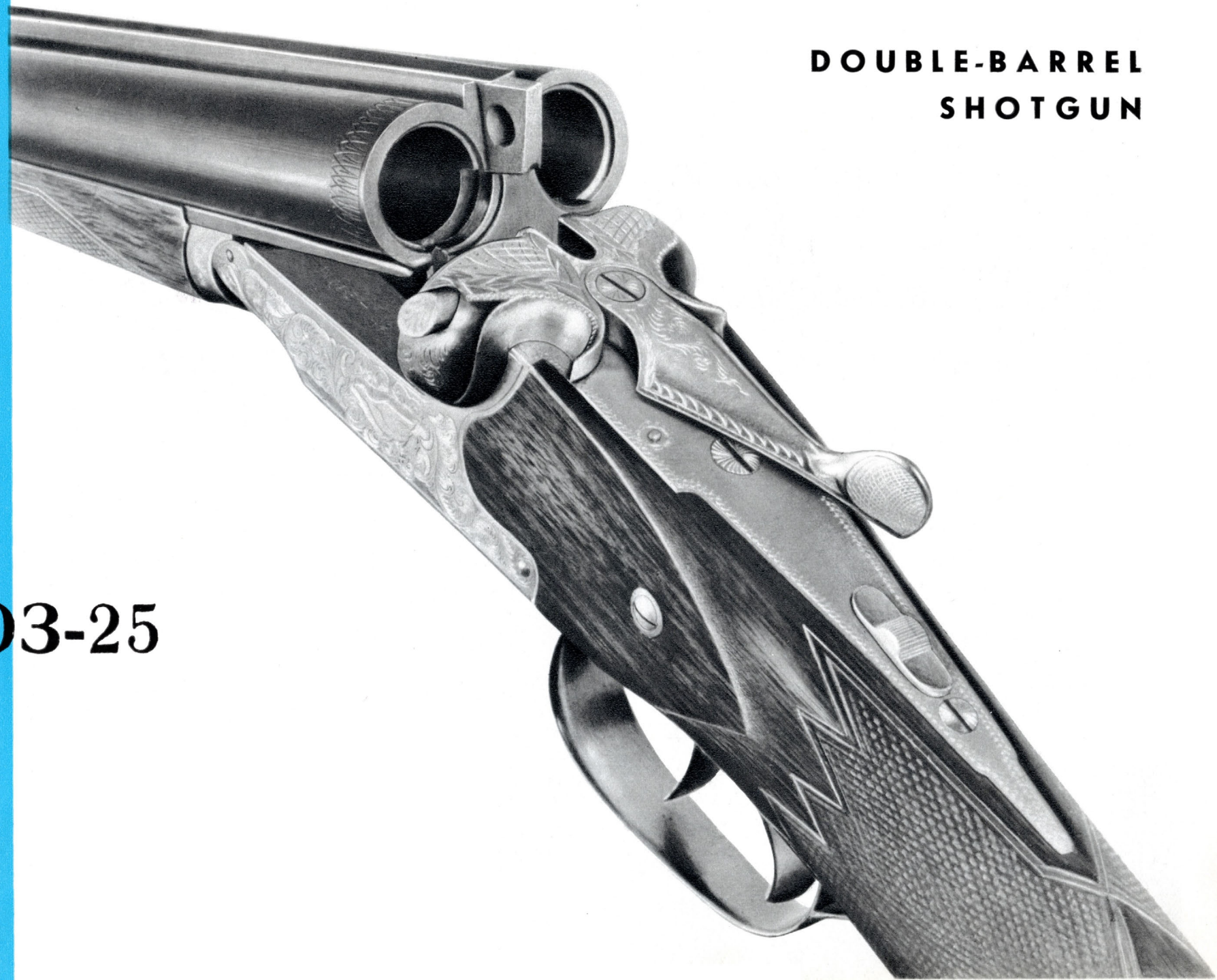
The stock grip is straight.

Shotgun weight, *kg*:

12 gauge — 3.0—3.2 with 730-*mm* barrel

16 gauge — 2.9—3.1 with 725-*mm* barrel

DOUBLE-BARREL SHOTGUN



TO3-25

The shotgun is used for sport and professional hunting.

The shotgun fires cartridges with paper or metal shells.

The side-by-side barrels are made detachable. The barrel bores and chambers are chrome-plated. The right-hand barrel has 0.5-*mm* tapering, the left-hand barrel — 1.0-*mm* tapering. The barrels are locked by the lever engaging the upper hook and by the locking plate engaging the lower hooks of the barrels.

The firing mechanism is furnished with rebounding inner hammers with safeties. The hammers are cocked on opening the shotgun.

The trigger mechanism with two triggers is mounted on a separate base plate. The trigger pull is 1.5—3.0 *kg*. To prevent accidental firing, there is a non-automatic safety rigidly locking the sear.

The stock and forearm are made of beech or birch, the stock having a pistol grip.

The shotgun metal parts are blackened. The side plates of the receiver are adorned with simple engraving.

The shotgun is a serial production weapon manufactured in 16, 20 and 28 gauges.

Shotgun weight, *kg*:

16 gauge — 2.7—2.9 with 730-*mm* barrel
20 gauge — 2.6—2.8 with 675-*mm* barrel
28 gauge — 2.6—2.8 with 675-*mm* barrel

The construction of the shotgun mechanisms is simple permitting complete disassembly and assembly of the weapon without any special training.

This model is very popular among hunters.

DOUBLE-BARREL
SHOTGUN

ИЖ-58

The ИЖ-54 shotgun, 12 gauge, is designed for sport and professional hunting.

By its characteristics this model ranks among the weapons of the highest class.

The side-by-side detachable barrels have muzzle tapering: right-hand barrel — 0.5 *mm*, left-hand barrel — 1.0 *mm*.

The bores and chambers are chrome-plated.

The barrels are connected to the receiver and locked by means of barrel hooks, hinge pin, forearm, transverse pin and locking frame.

The shotgun fires cartridges with paper or metal shells. Cartridge shells are pushed out of their chambers by a single common ejector when opening the barrels.

The firing and trigger mechanisms with two triggers are mounted on a separate base plate secured in the bottom part of the receiver. The trigger pull is within 2.4—2.7 *kg*.

On the top part of the receiver there are cocking indicators. Inner rebounding hammers are cocked on opening the barrels.

Strikers and hammers are made as two separate pieces.

The automatic safety locks the triggers and sear simultaneously, thus ensuring safe handling of the weapon.

The outer surface of the shotgun metal parts are adorned with elegant engraving.

The stock and forearm are made of walnut or beech with rifle or pistol grip.

The shotgun weighs 3.3—3.5 *kg*.

The length of barrels is 730 *mm*.

When hand-made, the ИЖ-54 shotguns have better ballistic and service characteristics, more elaborate hunting-scenes engraving and ornamentation. They differ from mass production weapons by a perfect adjustment of all mechanisms of the shotgun. This model is in permanent demand on internal and foreign markets.

DOUBLE-BARREL
SHOTGUN

ИЖ-54

The МЦ10 shotgun has exceptional firing characteristics, elegant appearance and original arrangement of all units. It is used for sport and professional hunting.

The detachable side-by-side barrels are made of high-quality steel. The barrels are connected to the receiver and locked by means of barrel hooks, hinge pin, forearm, transverse plate and locking frame.

The barrels of shotguns in 16 and 20 gauges have standard muzzle taperings. As a rule, the tapering of the right-hand barrel is 0.5 *mm* (half-choke), while the tapering of the left-hand barrel is 0.75 *mm* (choke).

As distinct from existing models the receiver of the МЦ10 shotgun is made of very strong light alloy.

The surface of the receiver is handsomely engraved.

The shotgun fires cartridges in paper or metal shells. Fired cartridge shells are pushed out of the chambers by a single common ejector.

The firing mechanism with inner hammers and the trigger mechanism with double triggers are mounted on a separate base plate secured in the bottom part of the receiver. The trigger pull of the front trigger is 1.7—2.0 *kg*, that of the rear trigger being 2.0—2.25 *kg*.

To prevent accidental firing provision is made for trigger safeties and hammer interceptors ensuring safety in handling.

The stock made of walnut or plastics has straight or pistol grip with or without cheek-piece, the forearm being also made of walnut or plastics.

The shotgun is a mass production weapon manufactured in 12, 16 and 20 gauges.

Shotgun weight, *kg*:

12 gauge — 3.0—3.2 with 750-*mm* barrels
16 gauge — 2.8—3.0 with 720-*mm* barrels
20 gauge — 2.6—2.8 with 675-*mm* barrels

DOUBLE-BARREL
SHOTGUN

МЦ 10

The ИЖ-12 shotgun is designed for sport and professional hunting.

The shotgun fires cartridges with paper shells.

The over-and-under detachable barrels are secured by bands in the breech part. The bores and chambers are chrome plated to facilitate cleaning and to protect them from the adverse effects of corrosion for a considerable period of time. The barrels are locked by a wide wedge engaging the hook of the barrels breech band. The bores have a special tapering. The trigger and firing mechanisms are mounted on a separate base plate in the receiver.

To prevent accidental firing provision is made for hammer interceptors. Rebounding hammers and strikers are made as separate pieces, the former being cocked on opening the barrels.

Firing springs are cylindrical, spiral.

The construction of the firing and trigger mechanisms ensures velvet-smooth release of the triggers. All the shotgun mechanisms are readily accessible for inspection, cleaning and repair.

The receiver side plates are adorned with machine-made engraving.

The stock is made of walnut or beech with pistol or rifle grip.

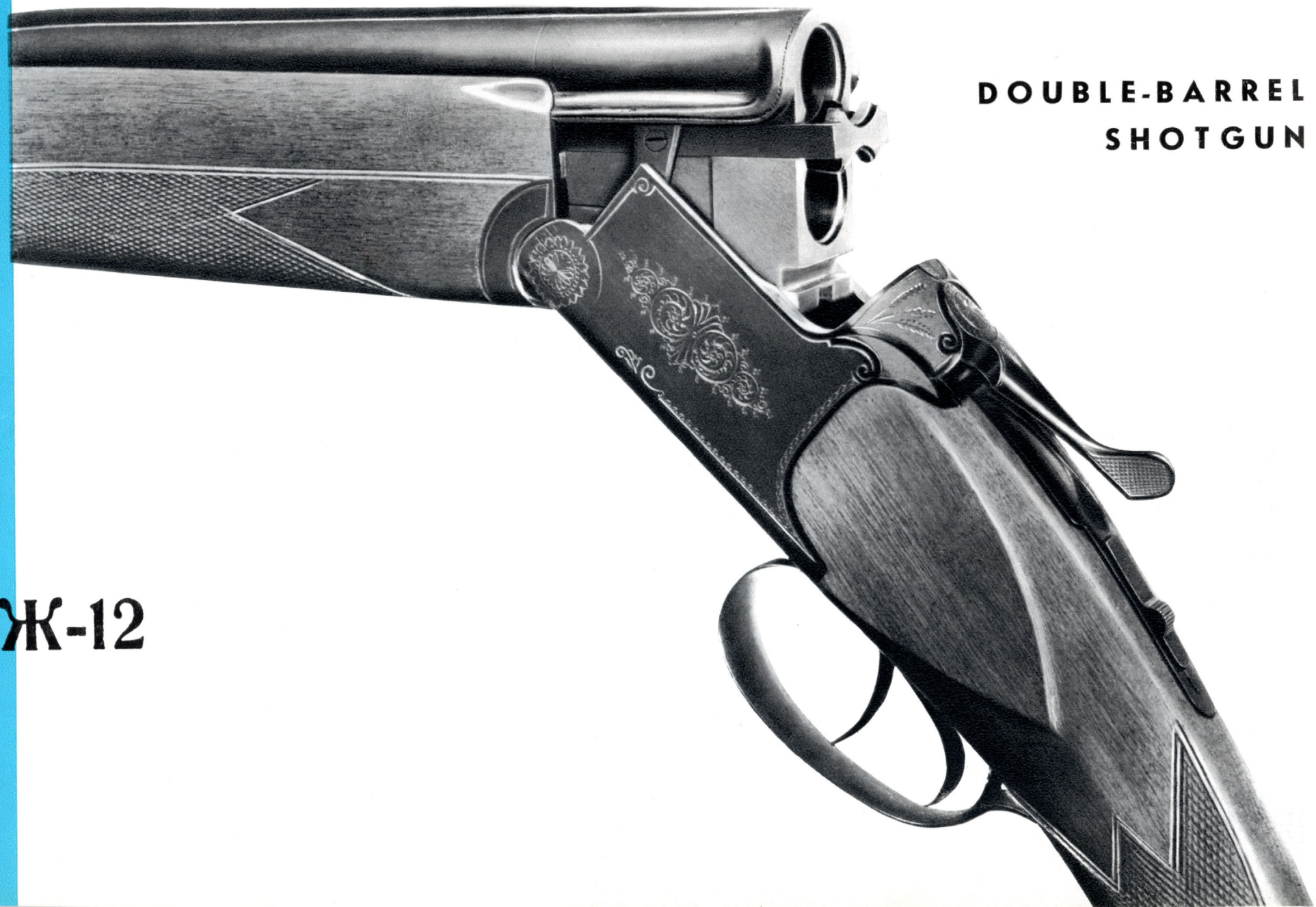
The detachable forearm is locked by a lever-type latch.

The ИЖ-12 shotgun is a serial production model manufactured in 12 and 16 gauges.

Weight of shotgun, *kg*:

12 gauge — 3.2—3.5 with 730-*mm* barrels
16 gauge — 3.1—3.3 with 720-*mm* barrels

The shotgun has been thoroughly tested and proved to be reliable in operation and safe in handling in various climatic conditions.



ИЖ-12

DOUBLE-BARREL SHOTGUN

The МЦ6 shotgun is a high-quality weapon hand-made on customers' orders or manufactured in small quantities. It is designed chiefly for sport hunting. This shotgun in 12 gauge is effectively used for sport shooting.

This model accepts cartridges with paper and metal shells.

Fired cartridge shells are pushed out of the chambers by a common ejector on opening the barrels.

The detachable over-and-under barrels have standard taperings. The over-and-under position of the barrels ensures good observation of the target and stability of the shotgun during firing. The barrels are connected to the receiver by means of barrel band, hinge, latch and locking frame.

The firing and trigger mechanisms with inner hammers and two triggers are mounted on a separate base plate. The front trigger is used for firing from the lower barrel.

The firing spring is compressed and the hammers are cocked on opening the barrels. The shotgun is provided with an automatic safety locking the triggers, thus ensuring safety in handling the weapon.

The stock made of walnut has a straight or pistol grip with or without cheek-piece.

The fixed forearm is also made of walnut and is secured on the barrels by screws.

The outer surface of the shotgun metal parts is adorned with exquisite engraving and embossing.

The shotgun is manufactured in 12 and 16 gauges.

As a sporting model the shotgun may be furnished with an additional pair of barrels 675 *mm* long having special muzzle bells.

Weight of shotgun, *kg*:

12 gauge — 3.2—3.6 with 750-*mm* barrels
16 gauge — 2.8—3.0 with 750-*mm* barrels

DOUBLE-BARREL
SHOTGUN

МЦ 6

TABLE OF SHOTGUN BASIC CHARACTERISTICS

Model	Weight, kg	Number of barrels	Position of barrels	Calibre	Length of barrels, mm	Boring of barrels, mm		Method of locking	Type of firing mechanism	Trigger pull, kg	Type of safety	Shape of stock	Stock material
						right-hand (upper)	left-hand (lower)						
ИЖ-17	2.7 2.6 2.6 2.5 2.4	1	—	12 16 20 28 32	730 730 675 675 675	0.25		By lever engaging barrel hook	With outer hammer	1.5—2.5	Rebounding hammer	Half-pistol	Birch or beech
ИЖ-18	2.7 2.6 2.6 2.5 2.4	1	—	12 16 20 28 32	730 730 675 675 675	0.25		Ditto	With inner hammer	1.5—2.5	Button, non-automatic	Pistol	Ditto
МЦ20	2.4—2.6 2.2—2.4	1	—	16 20	675 600	Cylindrical		By turning sliding bolt	Firing-pin type	1.5—2.0	Ditto	Ditto	Beech, birch or plastic
МЦ21	3.2—3.4 3.0—3.2 2.8—3.0	1	—	12 16 20	750 720 675	1.0		By wedge of sliding bolt	With inner hammer	2.2—2.6	Thumb-piece, non-automatic	"	Walnut
БМ	3.0—3.2 2.7—3.0	2	Side-by-side	16 20	725 700	0.25	0.5	By hinge joint	With outer hammers	2.0—2.5	Rebounding hammer	Half-pistol, pistol or rifle	Beech or walnut
ТОЗ-25	3.0—3.2 2.9—3.1	2	Side-by-side	12 16	730 725	0.25	1.0	By hinge joint	With inner hammers	1.7—2.2	Button, non-automatic	Rifle	Walnut or plastic
ИЖ-58	2.7—2.9 2.6—2.8 2.6—2.8	2	Ditto	16 20 28	730 675 675	0.5	1.0	By lever engaging barrel hook	Ditto	1.5—3.0	Ditto	Pistol	Beech or birch
ИЖ-54	3.3—3.5	2	"	12	730	0.5	1.0	By hinge joint	"	2.4—2.7	Button, automatic	Rifle or pistol	Walnut or beech
МЦ10	3.0—3.2 2.8—3.0 2.6—2.8	2	"	12 16 20	750 720 675	0.5	0.75	Ditto	"	1.7—2.0 2.0—2.25	Ditto	Ditto	Walnut or plastic
ИЖ-12	3.2—3.5 3.1—3.2	2	Over-and-under	12 16	730 720	1.0 0.75	0.5 0.5	By wedge engaging hook	"	1.75—2.25	Button, non-automatic	"	Walnut or beech
МЦ6	3.3—3.6 2.8—3.0	2	Ditto	12 16	750 675	1.0	0.5	By hinge joint	"	2.0—2.5	Button, automatic	"	Walnut

Hunting Rifled Weapons

The TOЗ-16 rifle is designed for professional hunting of wild fowl and small animals.

The rifle fires 5.6 *mm* rim fire cartridges at ranges up to 100 *m*.

With the fire accuracy being sufficiently high, the energy of the bullet at this range is much greater than the required killing impact velocity.

The slide action is simple in design and has a safety to prevent accidental firing.

The rifle barrel is pressed in the receiver. The bore has four rifling grooves. The rifle bore is locked by turning the bolt with the help of the bolt handle in the transverse slot of the receiver.

The rear sight is open, sector-type, adjustable for firing at a range of 250 *m*.

The foresight is roof-shaped.

The parts of the firing mechanism are mounted in the action, the trigger mechanism being fitted in the receiver.

The firing spring is compressed when the bolt is pushed to the forward position.

Fired cartridge cases are withdrawn from the chamber by the extractor when the bolt is moving rearward and are ejected outside by the receiver insert lug.

The stock made of the best grades of specially treated birch has a half-pistol grip without cheek-piece.

The rifle weighs 2.6 *kg*. The length of the barrel is 500—600 *mm*.

The trigger pull is within 0.8—2.0 *kg*.

The rifle is a mass production weapon.

Since this rifle is simple in construction, reliable and trouble-free in operation, convenient in handling, it is in great demand among professional hunters.

HUNTING SINGLE-SHOT RIFLE

TO3-16

The carbine is used for sport and professional hunting of wild fowl and small fur animals (squirrel, marten, sable). The carbine fires 5.6-*mm* rim fire cartridges, with lead bullets having sufficient killing impact velocity.

The carbine has a stock of a convenient shape and is noted for high accuracy of fire. Target sport ammunition having better fire accuracy may also be used for firing from the carbine.

The fact that the carbine is fitted with a five-shot changeable magazine considerably improves its service characteristics.

The slide action of a simple construction has a safety to prevent accidental firing.

The bore is securely locked by the bolt, when turning the latter in the transverse slot of the receiver.

The parts of the firing mechanism are mounted in the action, the trigger mechanism being fitted in the receiver. The trigger pull is within 0.8—2.0 *kg*.

The firing spring is compressed when the bolt is pushed to the forward position.

Fired cartridge cases are withdrawn from the chamber by the extractor and are ejected outside by the receiver insert lug when the bolt is moving rearward.

The rear sight is open, sector-type, adjustable for firing at a range of 250 *m*.

The foresight is roof-shaped. The stock made of birch has a rifle or half-pistol grip without cheek-piece.

The carbine is a mass production weapon and is delivered with a spare magazine.

The TO3-18 carbine is a modification of the TO3-17 model and differs from the latter in that besides open sight it is fitted with a telescopic sight mounted on a special bracket attached to the receiver.

The weight of TO3-17 and TO3-18 carbines (without telescopic sight) is 2.5—2.7 *kg*.

HUNTING
FIVE-SHOT
CARBINE

TO3-17

The ТОЗ-21 carbine is designed for sport and professional hunting of wild fowl and small fur animals. The most effective range of this weapon is within 100 *m*.

The carbine fires 5.6-*mm* rim fire cartridges. Target sport ammunition having higher accuracy of fire may also be used with the carbine.

The operation of the carbine automatic mechanism is based on the utilization of recoil energy of the slide action.

The fixed barrel is rigidly joined with the receiver. The bore is locked by the bolt mass and by the effort of the return spring.

The hammer-type firing mechanism has a separate firing spring. The hammer is cocked on shifting the bolt to the rearward position.

The trigger mechanism with an adjustable trigger permits the delivery of only single-shot fire, the trigger pull being equal to 0.8—1.5 *kg*.

The sighting equipment of the carbine includes the blade foresight and open stepped sector-type rear sight graduated for firing at ranges 25, 50, 75 and 100 *m*.

The ТОЗ-21 carbine may be furnished with a telescopic sight mounted on a special bracket attached to the receiver.

The carbine is fitted with a changeable 10-shot magazine.

To prevent accidental firing the carbine is provided with a button-type safety mounted in the firing and trigger mechanisms. The safety which locks the sear serves as a cocking indicator.

Fired cartridge cases are withdrawn from the chamber by the extractor and are ejected outside by the rigid lug of the receiver insert when the bolt is moving to the rearward position.

The stock made of beech or birch has a pistol grip without cheek-piece.

The carbine weighs 2.5—2.7 *kg*. The length of the barrel is 540 *mm*.

The carbine is a serial production model.

The carbine is furnished with a spare magazine and a case with accessories for disassembly and cleaning. To clean the weapon there is a special cleaning rod secured by special stops in the lower part of the barrel.

HUNTING
REPEATING
CARBINE

T03-21

The 5.6-*mm* carbine with 5-shot magazine is designed for professional hunting of medium-size animals and big wild fowl.

The carbine fires 5.6-*mm* cartridges with soft-nosed bullets having high initial velocity and great killing effect.

The carbine is quite simple in construction, reliable in operation, it has a convenient shape and high fire accuracy.

The bore is chrome-plated. The carbine barrel is locked by turning the slide bolt handle in the forward position.

Fired cartridge cases are withdrawn from the chamber by the extractor when the bolt is shifted to the rearward position and are ejected out of the receiver by the ejector.

The trigger mechanism is provided with a special device to adjust the trigger pull within 0.5—2.0 *kg*.

To prevent accidental firing provision is made for a thumb-piece-type safety conveniently installed on the right-hand side of the receiver; the safety locks simultaneously the bolt handle and the firing pin.

The aperture rear sight is graduated from 100 to 300 *m*. On orders from the customers the carbine may be furnished with a telescopic sight on a quick-release bracket.

The metal parts of the carbine are blackened.

The pistol grip stock is made of select grades of specially-treated birch.

The weight of the carbine without telescopic sight is 2.7 *kg*, the barrel length equalling 600 *mm*.

The carbine set includes a case and accessories for cleaning and disassembly.

The carbine has been thoroughly tested and proved to be reliable weapon in various climatic conditions.

HUNTING CARBINE

„БАРС-1“

The calibre of the „Лось" carbine is 9.0 *mm*. It is designed for professional hunting of big and medium-size game. It should be used chiefly for getting deer, mountain goats, wild goats, saigas, gazelles and the like.

The carbine fires 9.0-*mm* cartridges with soft-nosed bullets having great killing effect.

The carbine barrel is locked by turning the bolt handle in the front-most position.

The carbine is fitted with a 5-shot magazine. The magazine enables the hunter in case of necessity to make five shots within a very short space of time.

The pull of the trigger mechanism is adjustable within 0.5—1.5 *kg*.

Fired cartridge cases are withdrawn from the chamber by the extractor when the bolt is shifted to the rearward position and are ejected out of the chamber by the ejector.

The open rear sight is graduated from 100 to 500 *m*.

To meet the desires of the customers the carbine may be furnished with a telescopic sight mounted on a quick-release bracket.

The carbine is provided with a reliable and handy thumb-piece-type safety and cocking indicator installed in the bolt sleeve.

The pistol grip stock is made of select grades of specially-treated birch.

The weight of the carbine without telescopic sight is 3.1 *kg*, the barrel length being equal to 540 *mm*.

The carbine is reliable and trouble-free in operation, convenient in handling and has high accuracy of fire.

Customers may order hand-made carbines of this model having more thorough finish of all parts and receiver and with the stock made of walnut.

The carbine set includes a case and accessories for cleaning and disassembly.

HUNTING CARBINE

„ЛОСЬ“

The 9-*mm* carbine is a big-game weapon for professional hunting.

The carbine fires cartridges with half-nosed bullets having great killing effect.

The weapon is reloaded automatically due to the utilization of the energy of powder gases and the firing spring.

The bore is locked by three locking lugs on turning the bolt.

The carbine has an open rear sight graduated from 100—500 *m*.

The magazine capacity is 5 cartridges.

To reduce the force of recoil during firing the carbine is provided with a muzzle brake.

The steel parts are coated with corrosion-proof compound. The bore, chamber and the parts of the gas cylinder are chrome-plated.

The pistol grip stock is made of birch.

Carbine weight — 3.0 *kg*. Barrel length —520 *mm*. Trigger pull — within 1.0—1.5 *kg*.

The carbine is characterized by high fire accuracy.

This model is simple in design, trouble-free in operation and convenient in handling.

On special requests the carbine may be furnished with a telescopic sight mounted on a quick-release bracket.

HUNTING
REPEATING
CARBINE

„МЕДВЕДЬ“

TABLE OF BASIC CHARACTERISTICS OF RIFLED HUNTING WEAPONS

Model	Calibre, *mm*	Weight, *kg*	Barrel length, *mm*	Number of rifling grooves	Method of locking	Trigger pull, *kg*	Type of sight	Magazine capacity	Type of cartridge	Type of safety	Stock shape	Stock material
ТОЗ-16	5.6	2.6	500-600	4	By bolt handle	0.8-2.0	Open	Without magazine	Rim fire	Hammer locking, non-automatic	Half-pistol	Birch
ТОЗ-17	5.6	2.6	500-600	4	Ditto	0.8-2.0	Ditto	5 cartridges	Ditto	Ditto	Rifle or half-pistol	Ditto
ТОЗ-18	5.6	2.7	500-600	4	"	0.8-2.0	Open and telescopic	Ditto	"	"	Ditto	"
ТОЗ-21	5.6	2.7	540	4	By freely moving bolt and return spring	0.8-1.5	Open	10 cartridges	"	Button-type, non-automatic	Pistol	Beech or birch
„Барс-1"	5.6	2.7	600	6	By two locking lugs	0.5-2.0	Open and telescopic	5 cartridges	With increased initial velocity	Thumb-piece type, non-automatic	Pistol	Birch
„Лось"	9.0	3.1	540	4	Ditto	0.5-1.5	Ditto	Ditto	Soft-nosed bullet	Ditto	"	Ditto
„Медведь"	9.0	3.0	520	4	By three locking lugs	1.0-1.5	Open or telescopic	"	Ditto	"	"	"

Hunting Combination Guns

The „Белка" combination gun having one smooth-bore barrel in 28 or 32 gauge and one rifled barrel 5.6-*mm* calibre is used for professional hunting.

The over-and-under detachable barrels are connected to each other by means of special bands without connecting plates. The length of both barrels is 650 *mm*. The lower smooth-bore barrel has a slight muzzle tapering. The upper rifled barrel fires 5.6-*mm* rim fire cartridges. The barrels are locked by a hinged lever located in the receiver bottom part.

The firing and trigger mechanisms as well as the trigger selector mechanism for firing either the upper or the lower barrel are installed in the receiver.

The gun has one outer hammer and one trigger. Changing-over for firing either the smooth-bore or rifled barrel is effected by the button placed in the receiver tang.

The gun is provided with a safety to prevent firing a shot with the barrels unlocked.

Fired cartridge cases are pushed out of the chambers by the extractor on opening the barrels.

To ensure safety in handling the weapon there is a special interlock mechanism which prevents the hammer from being cocked while the barrel is unlocked.

The sight is of an open type.

The stock has a rifle grip. The forearm is detachable. The stock and forearm are made of select grades of specially-treated birch.

The outer surfaces of metal parts are blackened.

The gun weighs 3 *kg*, the lengths of barrels being 650 *mm*.

This combination gun is a mass production weapon.

If so desired the gun may be furnished with a telescopic sight and a mounting bracket.

ИЖ-56-3
„БЕЛКА“

DOUBLE-BARREL
COMBINATION GUN

The ИЖ-15 combination gun has one 16 gauge smooth-bore barrel and one upper rifled barrel for firing 5.6-*mm* cartridges having high bullet initial velocity.

A special adapter for firing 5.6-*mm* rim fire cartridges is inserted in the chamber of the upper barrel. This offers a possibility of shooting fowl and small fur animals without spoiling the carcass or skin.

The use of the adapter is the advantage of the ИЖ-15 gun over other combination guns.

The over-and-under barrels are detachable. The barrels are connected with the receiver by a hinge joint.

The locking and the construction of the firing and trigger mechanisms of the ИЖ-15 model are similar to the ИЖ-12 gun.

The locking of the barrels is single, effected by a broad locking plate and the hook of the barrels breech band. The firing and trigger mechanisms are fitted in the receiver. The rebounding hammers and strikers are made as two separate pieces. The hammers are cocked on opening the barrels. The non-automatic safety locks the sears with the hammers cocked.

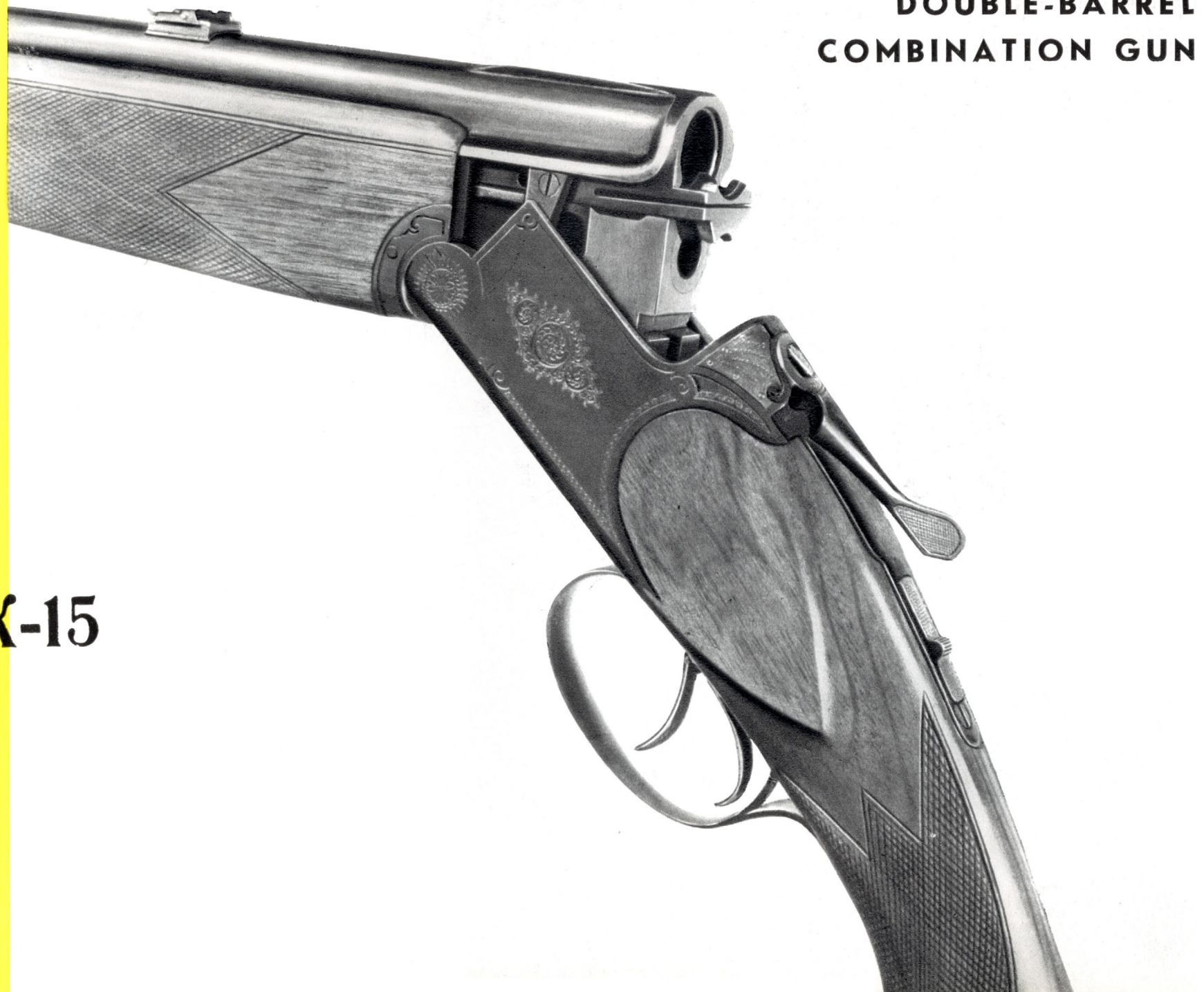
To ensure greater safety the hammers have additional safety cams. Apart from this the firing and trigger mechanisms are equipped with special hammer interceptors to prevent the hammers from being released spontaneously in case of sharp blows or excessive wear of cocking cams. The sight is of an open type graduated for ranges 100 and 200 *m*. The gun may also be furnished with a telescopic sight.

The pistol grip stock is made of walnut or beech. The forearm is detachable. The barrel length is 700 *mm*, the gun weight being 3.1 *kg*.

The gun is a serial production weapon.

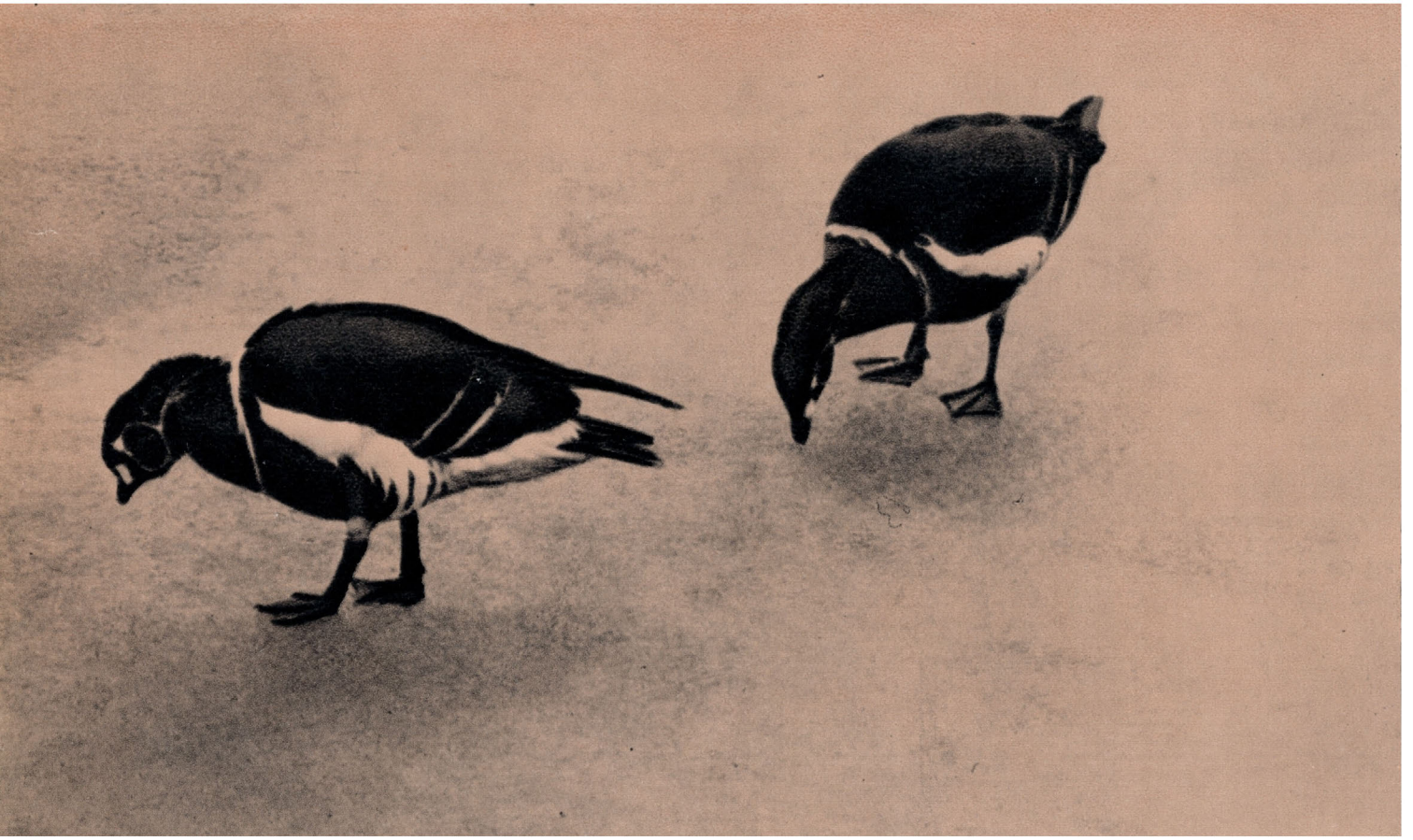
DOUBLE-BARREL
COMBINATION GUN

ИЖ-15



DOUBLE-BARREL
COMBINATION GUN

МЦ 29-03



The МЦ29-03 combination gun is designed for professional and sport hunting.

Of the two over-and-under barrels the upper smooth-bore barrel is used for firing shotgun cartridges 20 or 32 gauge, the lower rifled repeating barrel fires 5.6-*mm* rim fire cartridges.

The bore of the upper barrel has a standard muzzle tapering. The upper barrel is locked by the slide action on turning the bolt handle. The lower barrel is locked by the freely moving bolt. The upper barrel is loaded manually. Loading of the rifled barrel is effected from the tubular magazine holding 8 cartridges.

The magazine is fitted in the butt and is loaded through a side opening in the butt grip.

By making use of the selector single-shot and semi-automatic fire may be delivered from the rifled barrel.

The gun is furnished with a telescopic sight mounted on the receiver.

The action and the firing and trigger mechanisms of the lower barrel are placed on a common base plate.

The front trigger is used for firing the upper barrel.

Fired cartridge cases are removed from the upper and lower barrels when the bolt is shifted to the rearward position.

To prevent accidental firing provision is made for special safeties.

The pistol grip stock is made of high-quality grades of birch with a cheek-piece. If so desired, the stock may be made of walnut.

The gun weighs 2.8—3.2 *kg*. The length of the upper barrel is 600 *mm*, that of the lower barrel — 300 *mm*. The trigger pull is 1.0—1.5 *kg*.

The arrangement of parts and original design of the МЦ29 combination gun make it an object of keen interest of all hunters.

DOUBLE-BARREL COMBINATION GUN

The MЦ5 double-barrel gun is a de luxe weapon made only to special orders and in small batches. It is designed for sport and professional hunting.

The gun fires shotgun cartridges in paper or metal shells, or in case of rifled barrels — rifle centre-fire or rim-fire cartridges.

Fired cartridge cases are pushed out of the chambers by a common ejector on opening the barrels.

The over-and-under barrels are detachable. The bores of smooth-bore barrels have standard muzzle taperings. The over-and-under position of the barrels ensures excellent observation of the target and good stability of the gun during firing. The barrels are joined to the receiver by means of barrel band, hinge joint, latch and locking frame.

The firing and trigger mechanisms with inner hammers and two triggers are mounted on a separate base plate. The front trigger is used for firing the lower barrel.

The firing spring is compressed and hammers are cocked on opening the barrels.

The gun is provided with an automatic safety locking the triggers and thereby ensuring safety in handling.

The stock is made of walnut with a straight or pistol grip with or without cheek-piece.

The non-detachable forearm is also made of walnut and secured on the barrels with screws.

The outer surface of metal parts is adorned with elegant engraving.

The gun is manufactured in several models, each having various combination of barrels and sights (telescopic and open)(see the Table).

The barrels may be installed in the following combinations:

both barrels rifled;

rifled and smooth-bore barrels;

both barrels smooth-bore.

МЦ 5

Model	Upper barrel		Lower barrel		Length of barrel, *mm*	Weight of gun, *kg*	Type of sight
	Calibre	Cartridge	Calibre	Cartridge			
МЦ5-02	5.6	P	7.62	R	600	3.2—3.4	Telescopic, 4* magnification
МЦ5-12	5.6	P	32	S	675	2.2—2.4	Telescopic, 2* magnification
МЦ5-15	5.6	P	20	S	675	2.8—3.0	Telescopic, 2* magnification
МЦ5-18	5.6	P	16	S	675	3.0—3.25	Telescopic, 2* magnification
МЦ5-20	20	S	20	S	675	2.75—3.0	Open
МЦ5-27	20	S	7.62	R	675	3.2—3.4	Telescopic, 4* magnification
МЦ5-28	28	S	28	S	675	2.4—2.75	Open
МЦ5-32	32	S	32	S	675	2.2—2.4	Open

Note:

R — rifle cartridge
P — pistol cartridge
S — shotgun cartridge

The TO3-28 three-barrel combination gun with two upper smooth-bore barrels for shotgun cartridges 20 gauge and one lower rifled barrel for 6.5 *mm* cartridges is designed for shooting all kinds of game in sport and professional hunting.

The barrels are detachable. Their length is 600 *mm*.

The bores of the upper barrels have a standard muzzle tapering.

The barrels are connected to the receiver by means of barrel hooks, hinge joint and forearm pin, transverse pin and locking frame.

Firing mechanisms (right and left) are mounted on separate side plates.

Outer hammers are of a rebounding type.

Fired cartridge cases are pushed out of the chambers by a common ejector.

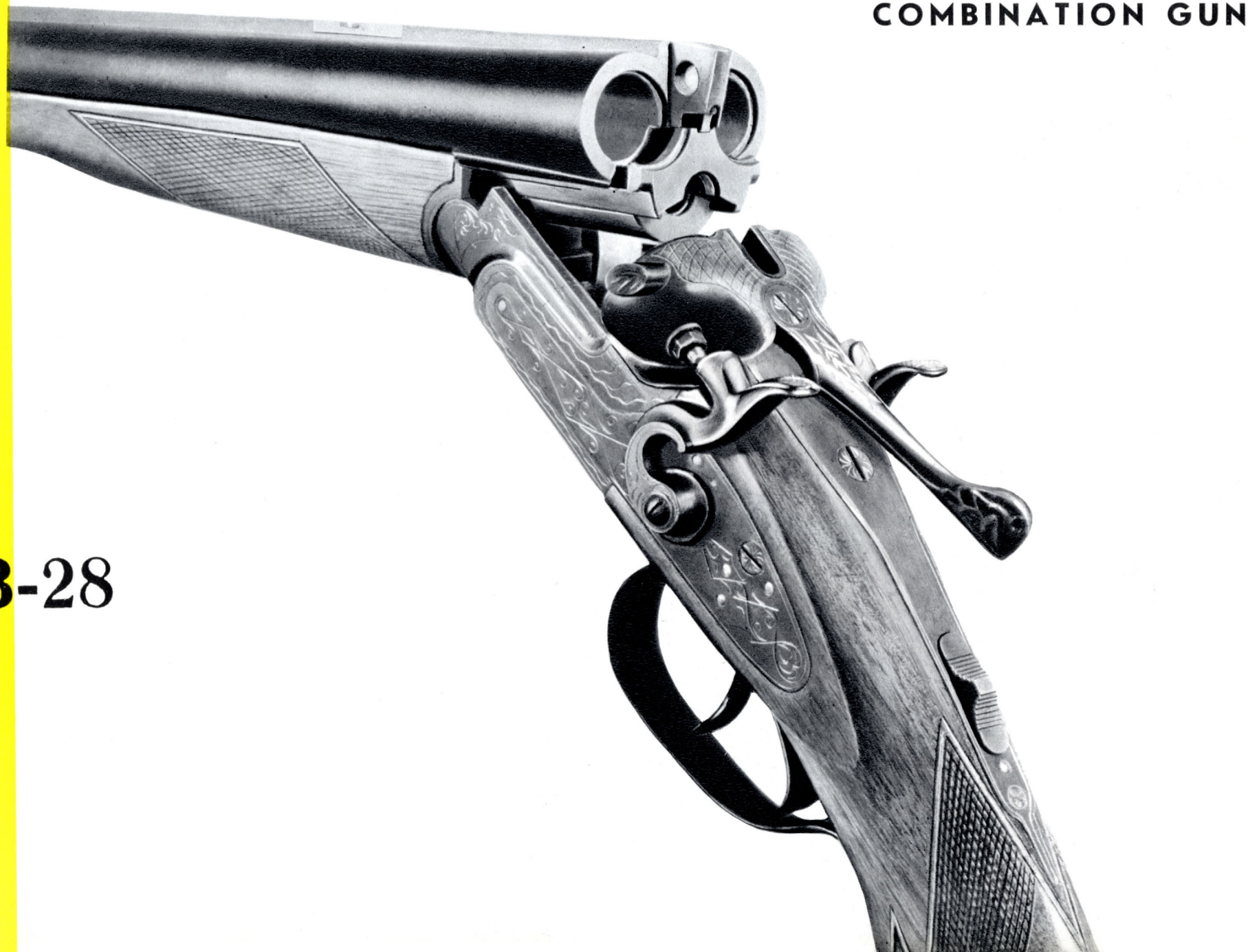
For firing the rifled barrel the double-trigger mechanism has a hair-trigger ensuring a pull within 150—300 *g*. To change-over for firing from shot barrels there is a selector.

The pistol grip stock is made of birch with or without cheek-piece.

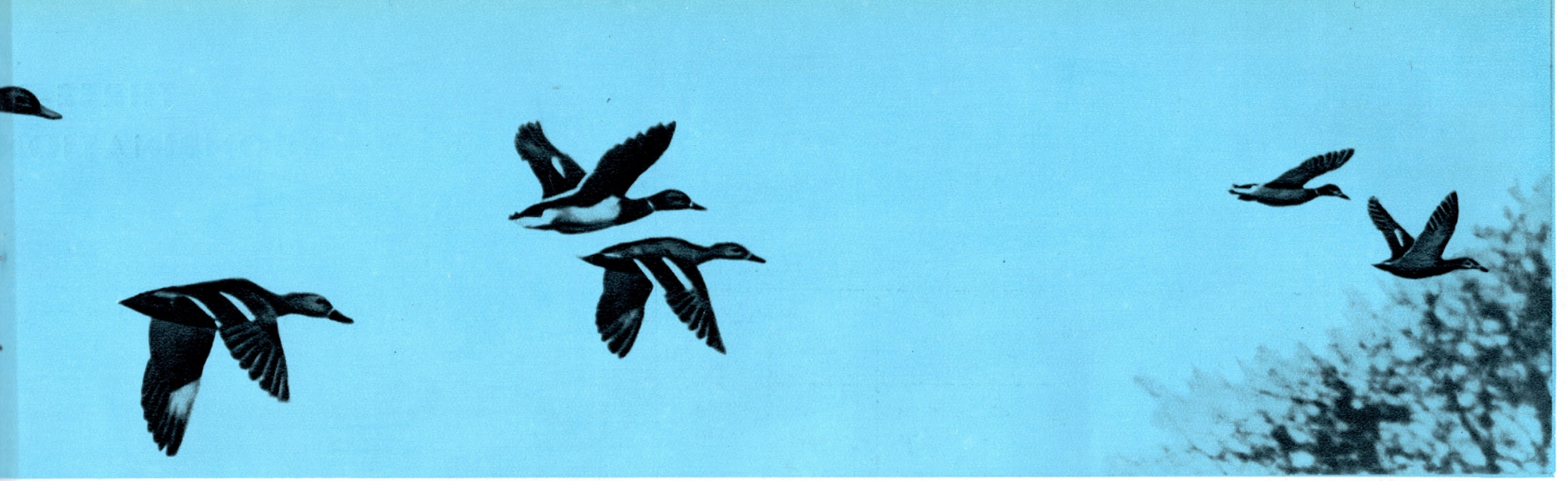
The weight of the gun is 3.1—3.3 *kg*.

The combination gun is a hand-made model manufactured to order.

THREE-BARREL COMBINATION GUN



TO3-28



The МЦ 30-20 combination gun with two smooth-bore barrels for shotgun cartridges 20 gauge and one rifled repeating barrel for 5.6 *mm* rim fire target cartridges is designed for sport hunting.

The gun differs from earlier models by its rifled repeating barrel with a 5-shot magazine, original construction of the firing, trigger and feed mechanisms.

The barrels are detachable. The bores of the upper barrels have a standard muzzle tapering. The barrels are connected with the receiver by means of barrel hooks, hinge joint and forearm latch, transverse pin and locking frame.

Cartridges are fed from the magazine into the chamber of the rifled barrel automatically when the bolt is shifted to the forward position. The cartridge is locked in the chamber of the lower barrel by the bolt mass and the return spring. The upper barrels are loaded manually.

The firing and trigger mechanisms of the upper barrels are mounted on a single base plate. The firing mechanism of the lower barrel is fitted in the forearm. The trigger pull is 2.0—2.5 *kg*.

The hammers of the upper barrels are cocked on opening the barrels. The lower barrel hammer is cocked manually or automatically when the bolt is moving to the rearward position.

To reduce the probability of accidental shots provision is made for safeties of triggers and sears. Setting trigger safeties ON and OFF is done by means of a selector placed on the base plate of the firing and trigger mechanisms.

Fired cartridge cases are pushed out of the chambers of the upper barrels by a common ejector. Fired cases are withdrawn from the lower barrel by the extractor and are ejected outside by the ejector when the bolt is shifted to the rearward position.

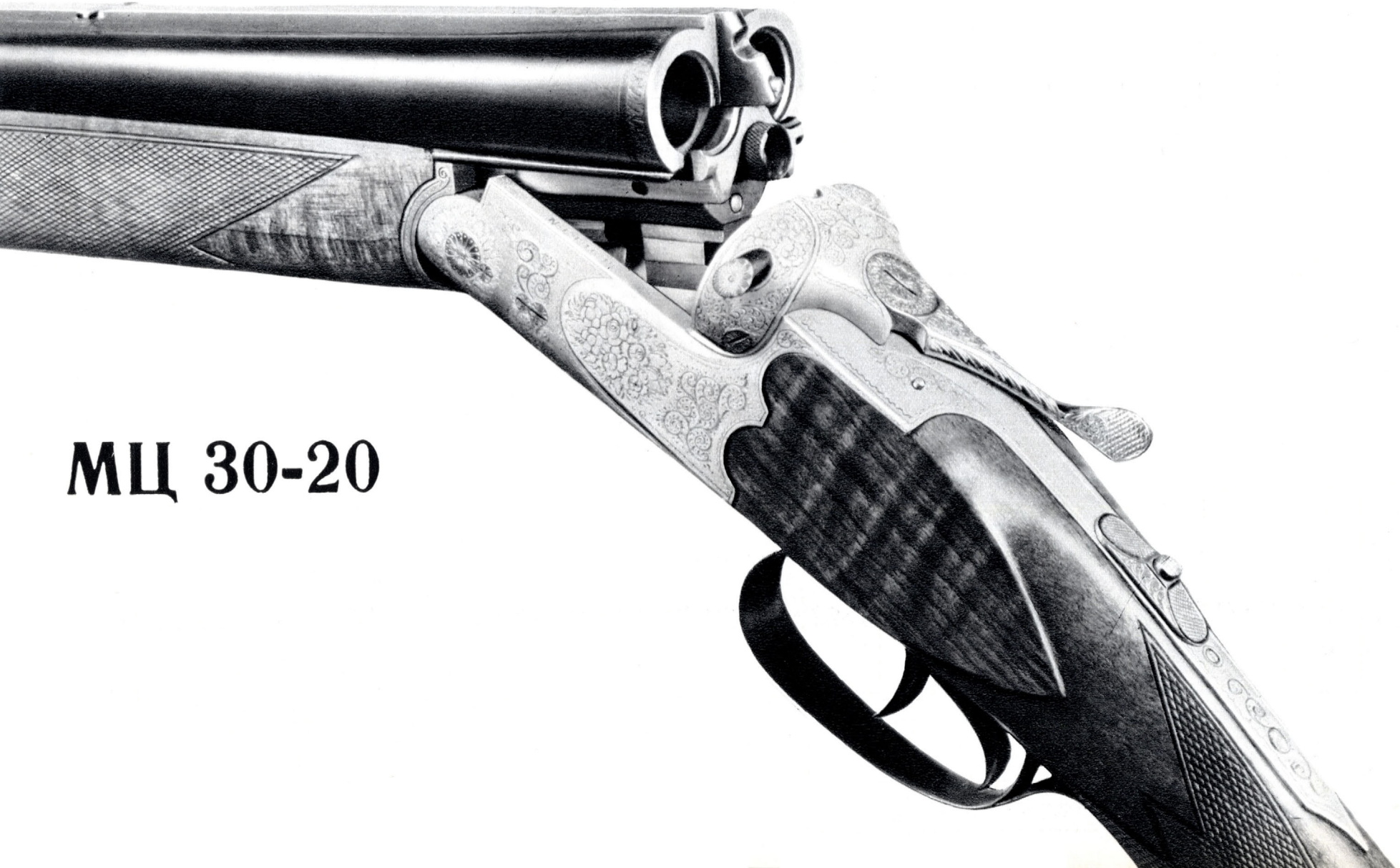
The stock made of walnut has a pistol grip with a cheek-piece.

The outer surface of the receiver is adorned with beautiful engraving.

The gun weighs 3.5—3.7 *kg*. The length of the upper barrel is 675*mm*, lower barrel — 400 *mm*.

The guns of this model are made to order.

THREE-BARREL
COMBINATION GUN



МЦ 30-20

TABLE OF BASIC CHARACTERISTICS OF COMBINATION GUNS

Model	Number of barrels	Weight, kg	Shot barrel gauge (mm)	Rifled barrel calibre (mm)	Length of barrels, mm: shot	Length of barrels, mm: rifled	Type of cartridge for rifled barrel	Method of lockings: shot barrel	Method of lockings: rifled barrel	Method of loading of rifled barrel	Firing mechanism	Trigger mechanism	Safety mechanism	Material	Stock shape	Sight
ИЖ-56-3 „Белка"	2	3.0	28 or 32	5.6	650	650	5.6 *mm* rim fire	By hinged lever	By hinged lever	Single-shot	Outer hammer	One trigger with button-type selector	Rebounding hammer	Birch	Rifle	Open
ИЖ-15	2	3.1	16	5.6	700	700	5.6 *mm* high initial velocity and 5.6 *mm* rim fire	By hinged joint	By hinged joint	Ditto	Inner hammers	Two triggers	Button-type, non-automatic, with hammer interceptors	Walnut or beech	Pistol	Ditto
МЦ29-03	2	2.8—3.2	20 or 32	5.6	600	300	5.6 *mm* rim fire	By slide action	By sliding bolt	Repeating	Firing pin	Ditto	Thumb-piece-type, non-automatic	Walnut	Pistol with cheek-piece	Telescopic
МЦ5	2	2.2—3.2	16 or 20, 28, 32 as required	7.62 5.6	675	600 or 675	7.62 *mm* rifle, 5.6 *mm* rim fire, 5.6 *mm* high initial velocity	By hinged joint	By hinged joint	Single-shot	Inner hammers	„	Button-type automatic	Ditto	Straight or pistol with cheek-piece	Open or telescopic
ТОЗ-28	3	3.1—3.3	20/20	6.5	600	600	6.5 *mm*	Ditto	Ditto	Single-shot	Outer hammers	Two triggers with selectors	Rebounding hammers	Birch	Pistol with cheek-piece	Open with elevating peep bar
МЦ30-20	3	3.5—3.7	20/20	5.6	675	400	5.6 *mm* rim fire	„	By sliding bolt	Repeating	Inner hammers	Two triggers	Button-type, non-automatic	Walnut	Ditto	Sight leaf with elevating peep bar

SPORTING WEAPONS

The present chapter contains information on models of sporting weapons manufactured in the Soviet Union.

At various shooting contests rifled, smooth-bore firearms and pneumatic weapons are used.

Sporting Rifled Weapons

Rifled weapons are subdivided into two groups: match weapons and free sporting weapons.

Rifled match weapons include rifles and pistols which according to the rules of the shooting competitions have certain limitations in weight, shape of stock, trigger pull, dimensions and the construction of shoulder-piece and palm rest. Belonging to this group are such models as ТОЗ-8М, ТОЗ-12, СМ-2, БК-2, МЦУ, МЦ1-2 and others.

ТОЗ-8М, ТОЗ-12 and СМ-2 rifles are mass production models delivered without sighting accessories and tools. Such rifles are packed several pieces in one box and are sold at a low price.

Match rifles such as БК-2, МБО-1, МЦ80-1, БИ-7.62 and others are either manufactured in batches or hand-made. As a rule such weapons are packed separately and are furnished with sighting accessories, tools and accessories for disassembling and cleaning.

Match pistols are packed separately in convenient portable cases and are furnished with sets of sighting accessories and tools for disassembling and cleaning the pistol.

Models of this type of sporting rifled weapons are used in various kinds of competitions and training and are extremely popular among marksmen.

Free rifled weapons include high-quality rifles and pistols having high stable fire accuracy, sensitive hair trigger mechanisms, adjustable shoulder-pieces and palm rests and sighting equipment allowing fine corrections in windage and elevation. Besides that, these weapons have specially-shaped stocks (rifles) and orthopedic grips (pistols) for more convenient firing from various positions.

Sporting free weapons are designed for achieving highest results in shooting at fixed targets; they are mass produced or hand-made and have a relatively high price as compared with general purpose sporting weapons.

Piece-work models made at a factory are individually adjusted depending on peculiarities of each marksman.

Quantity produced models are adjusted by the user by means of adjusting equipment delivered with these weapons.

Sporting rifles and pistols are packed in handsome convenient individual cases together with sighting equipment, accessories for firing and tools for cleaning and disassembly.

Sporting Smooth-Bore Weapons

Sporting smooth-bore weapons include high class shotguns having special boring of barrels which ensures high fire accuracy and close shot pattern.

The units and parts of such shotguns are thoroughly and individually adjusted, they are provided with universal triggers, ejectors, cocking indicators, hammer interceptors, ventilated ribs and other special mechanisms improving their service characteristics.

As distinct from ordinary shotguns sporting shotguns have greater weight (3.5—3.9 *kg*), careful selection of dimensions, higher manoeuvrability and exquisite expensive engraving of the weapon surfaces. The stock and forearm of a sporting shotgun are made of the highest grades of walnut or beech.

Sporting shotguns include double-barrel side-by-side models МЦ11-1, МЦ11-2, МЦ11-3, МЦ11-4, ИЖ-54 and over-and-under models МЦ8, МЦ9 and others. These shotguns are used for sport shooting at fast moving targets — disks from trench or round stands.

As a rule sporting shotguns are hand-made or produced in small batches. The manufacture of a weapon of this kind is a very time-consuming process.

Air Weapons

Depending on the construction the air weapons are divided into spring and gas-cylinder types.

In spring type weapons the air is compressed by a spring-loaded piston, whereas in cylinder type weapons carbon dioxide contained in the gas cylinder at a high pressure is used for firing.

Gas-cylinder rifles are a new type of pneumatic weapons which were more and more widely employed in the past few years.

Spring type pneumatic rifles were designed and manufactured much earlier. Air weapons are used mainly during the initial stage of marksman training. Besides, air spring type weapons are often used in shooting galleries.

Fire from air weapons is usually delivered at short ranges 10—25 *m*.

The group of air weapons includes the following models: МЦ100-2, МЦ110-2, МЦ110-1 and others.

Soviet sporting weapons are famous for their high quality of manufacture.

Soviet models of rifled and smooth-bore weapons are widely popular in the Soviet Union and abroad. Such models are МЦ8, МЦ11, МЦ-12, МЦ13, МЦ2-3 and others.

Using various Soviet-made models of sporting weapons at many important All-Union and international contests our marksmen permanently win prizes and establish records.

The table below shows the results achieved by the Soviet national team at World Championships in 1958 and 1962.

37th World Shooting Championship, Moscow, 1958

States	Number of medals				Number of world records		Number of prizes won
	Gold	Silver	Bronze	Total	Individual	Team	
USSR	65	14	8	87	8	9	6
USA	4	24	15	43	1	—	—
Finland	3	11	12	26	2	—	—
Czechoslovakia	4	6	13	23	—	1	1
Hungary	—	8	11	19	—	—	—
Great Britain	6	—	5	11	1	1	—
Romania	2	6	3	11	—	—	—
German Federal Republic	1	8	1	10	—	—	—
Yugoslavia	—	6	4	10	—	—	—
Sweden	—	1	8	9	—	—	—
Korean People's Democratic Republic	—	—	4	4	—	—	—
Bulgaria	—	1	—	1	—	—	—
Belgium	—	1	1	1	—	—	—

38th World Shooting Championship, Cairo, 1962

States	Number of medals				Number of world records		Number of prizes won
	Gold	Silver	Bronze	Total	Individual	Team	
USSR	22	11	4	37	1	2	13
USA	7	13	10	30	3	1	—
Switzerland	2	5	6	13			—
German Democratic Republic	2	1	2	5			—
Sweden	1	—	4	5			—
German Federal Republic	—	1	4	5			—
Finland	1	—	2	3			—
Venezuela	2	—	—	1			—
India	—	1	—	1			—
Japan	—	1	—	1			—
Norway	—	1	—	1			—
South Africa	—	1	—	1			—
Hungary	—	1	—	1			—

The data given in the Table show not only the skill of Soviet sharp-shooters but also the high quality of Soviet sporting weapons and ammunition.

Sporting Shotguns

The МЦ9 double-barrel sporting shotgun, 12 gauge, is designed for stand-shooting.

The over-and-under barrels are detachable. The bores have muzzle taperings equalling 0.75 *mm* (so-called parabolic choke) to ensure hitting targets at ranges up to 50 *m*. The barrels are connected to the receiver by means of barrel hooks, hinge pin, forearm latch, locking frame and transverse pin.

The firing mechanism with inner hammers is mounted on separate side plates.

The trigger mechanism has two universal triggers, each allowing the shooter to fire both barrels in succession. The front trigger is spring-loaded. The trigger pull is equal to 1.8—2.2 *kg*. The firing springs are compressed as the barrels are closed.

The shotgun fires standard size cartridges in paper shells.

To prevent accidental firing there is a trigger safety and hammer interceptors.

The shotgun has an ejector to extract fired cartridge shells from the chambers, cocking indicators and ventilated sighting leaf.

The pistol grip stock is made of the finest grades of walnut.

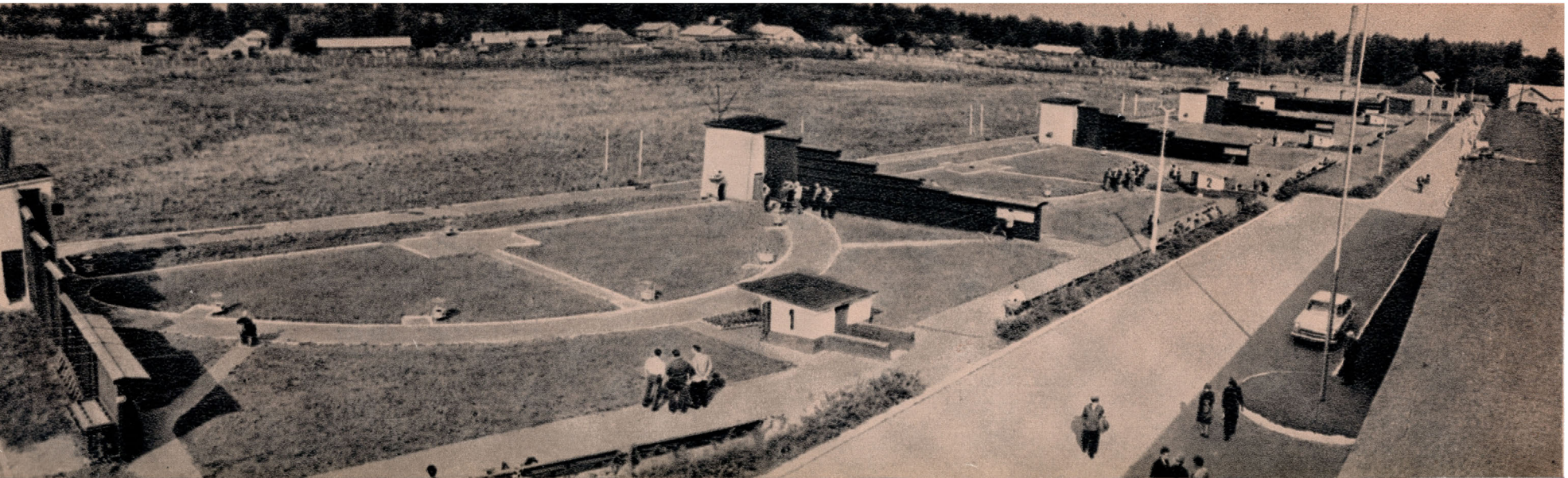
The forearm is secured on the lower barrel by a latch.

The shotgun weighs 3.6—3.9 *kg*, the length of the barrels being 750 *mm*.

The outer surfaces of the receiver are richly engraved.

The МЦ9 shotgun is a high-quality weapon, it is dependable in operation and safe in handling. It has an elegant appearance.

The shotgun is a hand-made model manufactured to order.



DOUBLE-BARREL
SPORTING SHOTGUN

МЦ 9

The ИЖ-54 „СПОРТ" shotgun, 12 gauge, belongs to a group of extra-class weapons. The shotgun is designed for stand-shooting.

Detachable side-by-side barrels have muzzle taperings: right-hand barrel —0.6 *mm*, left-hand barrel —1.0 *mm*. The bores and chambers are chrome-plated. The barrels are connected to the receiver and locked by means of barrel hooks, hinge pin, forearm, transverse pin and locking frame.

The shotgun fires cartridges in paper shells. Fired cartridge shells are pushed out of the chambers by a common ejector when opening the barrels.

The firing and trigger mechanisms with two triggers are mounted on a separate base plate secured in the lower part of the receiver. The trigger pull is within 2.4—2.7 *kg*.

In the top part of the receiver there are cocking indicators. Hammers are internal and are cocked on opening the barrels.

Strikers and hammers are made as two separate pieces.

The automatic safety locks simultaneously the triggers and sear, thus ensuring safety in handling the shotgun.

The outer metal parts of the shotgun are adorned with elegant engraving.

The stock made of walnut has a rifle or pistol grip.

The gun weighs 3.6—3.8 *kg*, the length of the barrels being 750 *mm*.

The ИЖ-54 „СПОРТ" shotgun is a hand-made weapon manufactured to order.

DOUBLE-BARREL
SPORTING SHOTGUN

ИЖ-54
„СПОРТ“

The МЦ11 double-barrel hand-made shotgun is used for firing at fast moving targets in shooting galleries.

The shotgun fires 12 gauge cartridges in paper shells.

The shotgun is furnished with one or two pairs of barrels. 750-*mm* barrels have special muzzle taperings, while 675-*mm* barrels are provided with pre-muzzle bells to hit targets at short ranges more effectively.

The side-by-side barrels are detachable. The barrels are connected to the receiver and locked by means of barrel hooks, hinge pin, forearm, transverse pin and locking frame.

Firing mechanisms with inner hammers and trigger mechanism with two ordinary or universal triggers are mounted on separate base plates.

Cartridge shells are extracted from the chambers by separate ejectors fitted in the forearm.

The shotgun has hammer interceptors and automatic safety rigidly locking the triggers to ensure complete safety in handling.

The outer surfaces of metal parts are adorned with delicate and beautiful engraving and embossing.

The walnut stock has a pistol grip with or without cheek-piece.

The weight of the shotgun is 3.5—3.7 *kg*.

The МЦ11 shotgun was used with great success by leading marksmen of the Soviet Union at international shooting competitions where they repeatedly won prizes and gold medals.

The shotgun is manufactured in four models: МЦ11-1, МЦ11-2, МЦ11-3 and МЦ11-4.

Characteristics \ Shotgun model	МЦ11-1	МЦ11-2	МЦ11-3	МЦ11-4
Gauge	12	12	12	12
Number of barrel pairs	1	1	2	2
Length of barrels, *mm*	750	750	750 and 675	750 and 675
Trigger mechanism	Ordinary with two triggers	Universal with one trigger	Ordinary with two triggers	Universal with one trigger

DOUBLE-BARREL SPORTING SHOTGUN

MЦ 11

The МЦ8-2 hand-made shotgun, 12 gauge, is designed for shooting at fast moving targets in shooting galleries.

The shotgun fires 12 gauge cartridges in paper shells.

The weapon is furnished with one or two pairs of barrels. The over-and-under barrels are detachable. The length of the main barrels is 750 *mm*, the auxiliary pair of barrels equalling 675 *mm*.

The main barrels have special muzzle taperings, while the auxiliary barrels are provided with pre-muzzle bells.

The outer surface of the receiver, if so desired, may have handsome engraving.

The barrels are connected to the receiver by means of barrel band, hinge joint, latch, transverse pin and locking frame.

The firing and trigger mechanisms with inner hammers and with one or two triggers are mounted on a separate base plate.

To prevent accidental firing provision is made for an automatic safety locking the triggers.

Fired cartridge shells are pushed out of the chambers by one common ejector when opening the barrels.

The stock made of walnut has a pistol or rifle grip with cheek-piece.

The forearm is non-detachable secured on the barrel with screws.

The shotgun weighs 3.6—3.8 *kg*.

Due to its high service qualities the МЦ8-2 shotgun has won great popularity among many sportsmen.

Using this shotgun at various competitions sportsmen often won prizes.

DOUBLE-BARREL
SPORTING SHOTGUN

МЦ 8-2

TABLE OF BASIC CHARACTERISTICS OF SPORTING SHOTGUNS

Model	Weight, kg	Gauge	Length of barrels, mm	Position of barrels	Barrel boring, mm		Locking of barrels	Type of trigger mechanism	Method of shell extraction	Type of safety	Stock shape	Stock material
					right (upper)	left (lower)						
ИЖ-54 „Спорт"	3.6—3.8	12	750	Side-by-side	0.5	0.75	By hinge joint	With two triggers	Manually with preliminary start by common ejector	Button-type, automatic	Rifle or pistol	Walnut
МЦ11	3.5—3.7	12	main 750 auxiliary 675	Ditto	On orders from 0.25 to 1.25 with pre-muzzle bell		Ditto	With two ordinary and one universal trigger	Automatically, by separate ejectors	Ditto	Pistol with or without cheek-piece	Ditto
МЦ8-2	3.6—3.8	12	main 750 auxiliary 675	Over-and-under	Ditto		„	Ditto	Manually with preliminary start by common ejector	„	Pistol with cheek-piece	„
МЦ9	3.6—3.9	12	main 750 auxiliary 675	Ditto	Parabolic choke 0.75 with pre-muzzle bell		„	With two universal triggers	Automatically, by one ejector	„	Pistol with or without cheek-piece	„

Sporting Rifles and Pistols

The single-shot ТОЗ-8М rifle is designed for the initial training of marksmen. Flawless dependable operation of the rifle ensured its great popularity among sportsmen as well as hunters who use this weapon for shooting fur animals.

The rifle fires 5.6-*mm* rim-fire cartridges for sport and hunting.

The rifle is provided with a slide-type bolt. The rifle bore is locked by the bolt body. In the front part of the bolt there is an extractor and cartridge-case holder.

The parts of the firing mechanism are fitted in the bolt.

The open rear sight is adjustable for 250 *m*. The foresight is cylindrical with a protector.

The non-adjustable trigger mechanism without hair trigger is mounted in the receiver. The trigger pull is within 0.8—2.0 *kg*.

The stock made of birch has a half-pistol grip without cheek-piece.

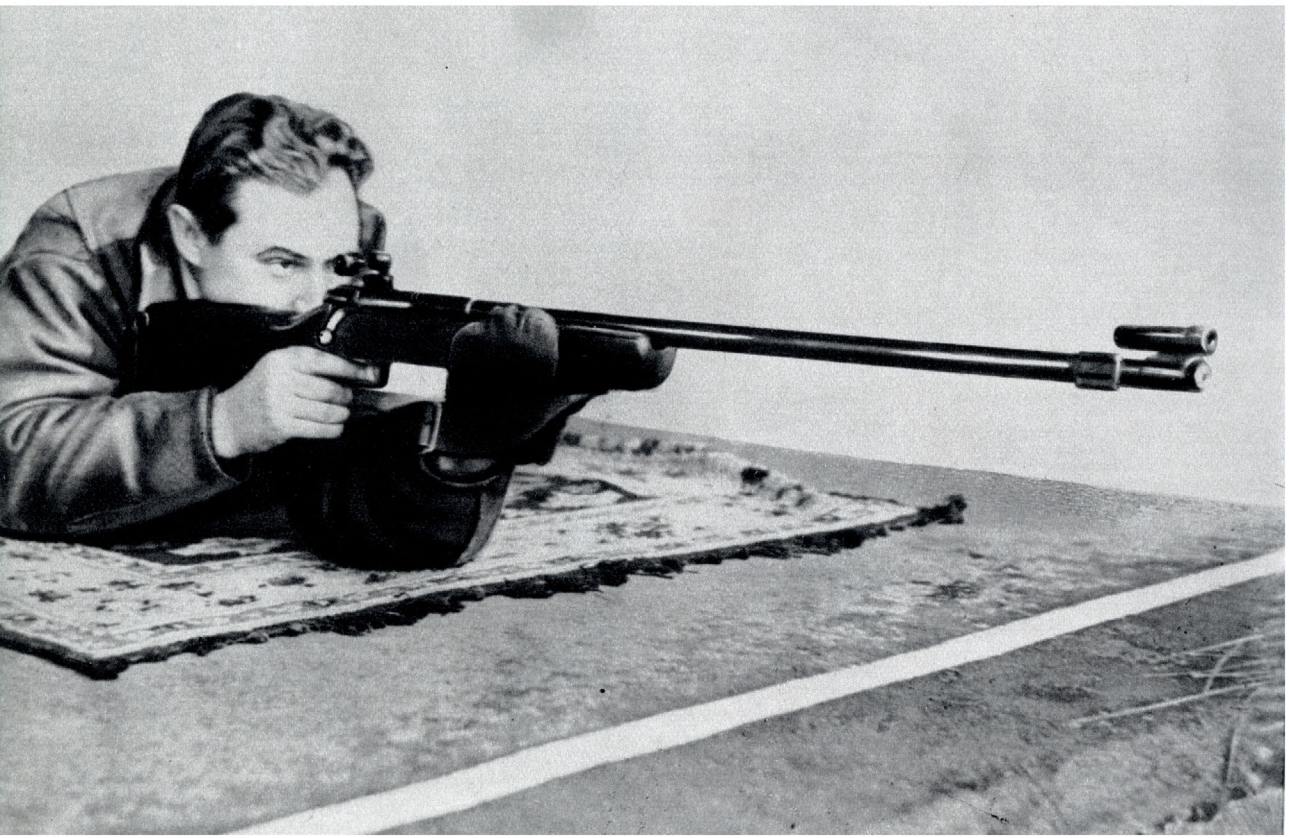
The weight of the rifle is 3—4 *kg*, the length of the barrel being 600—640 *mm*.

The rifle is simple in design, reliable in operation and convenient in handling.

The rifle is a quantity production model.

SPORTING RIFLE

TO3-8M



The single-shot TO3-12 rifle is a modified model of TO3-8M; it is used for firing at ranges up to 100 *m*.

The rifle fires 5.6 *mm* rim-fire target or sport-hunting cartridges.

The rifle is provided with a slide-type bolt.

The rifle bore is locked by turning the bolt handle.

The parts of the firing mechanism are fitted in the bolt. The non-adjustable trigger mechanism is mounted in the receiver.

The aperture type rear sight is fixed on a special base on the receiver. The replaceable foresights are of ring or blade types.

Fired cartridge cases are withdrawn from the chamber by the extractor and are ejected by the receiver insert lug.

The stock manufactured of the best grades of birch or beech has pistol grip without cheek-piece. If so desired, the stock may be made of walnut.

The lengthened forearm has grooves for attaching balancing weights.

The rifle weighs 3—4 *kg*. The length of the barrel is 600—640 *mm*.

The rifle is a mass production model.

The TO3-12 rifle is furnished with replaceable sight-vanes, foresights, balancing weights and cleaning rod.

SPORTING RIFLE

TOZ-12

The СМ-2 single-shot rifle belongs to the group of sporting practice weapons; it is used for training of marksmen and serves as an intermediate link between the ТОЗ-8М rifle and target match rifles of a higher class. The rifle has excellent accuracy and stability of fire.

The rifle fires 5.6-*mm* rim-fire target or sport-hunting cartridges. The 680-*mm* barrel is heavy.

The bore is locked by one locking lug.

The non-hair trigger mechanism has two adjusting screws for separate adjustment of trigger pull and creep. The trigger pull is adjustable within 0.5-1.5 *kg*, the trigger creep being 1—4 *mm*.

The aperture sight of this rifle is similar to that of the „СТРЕЛА-3" target rifle. The sighting radius is adjusted within 780—870 *mm*.

The stock made of birch has a pistol grip with a cheek-piece. The length of the butt is adjusted by means of pads.

The weight of the rifle is not more than 5 *kg*.

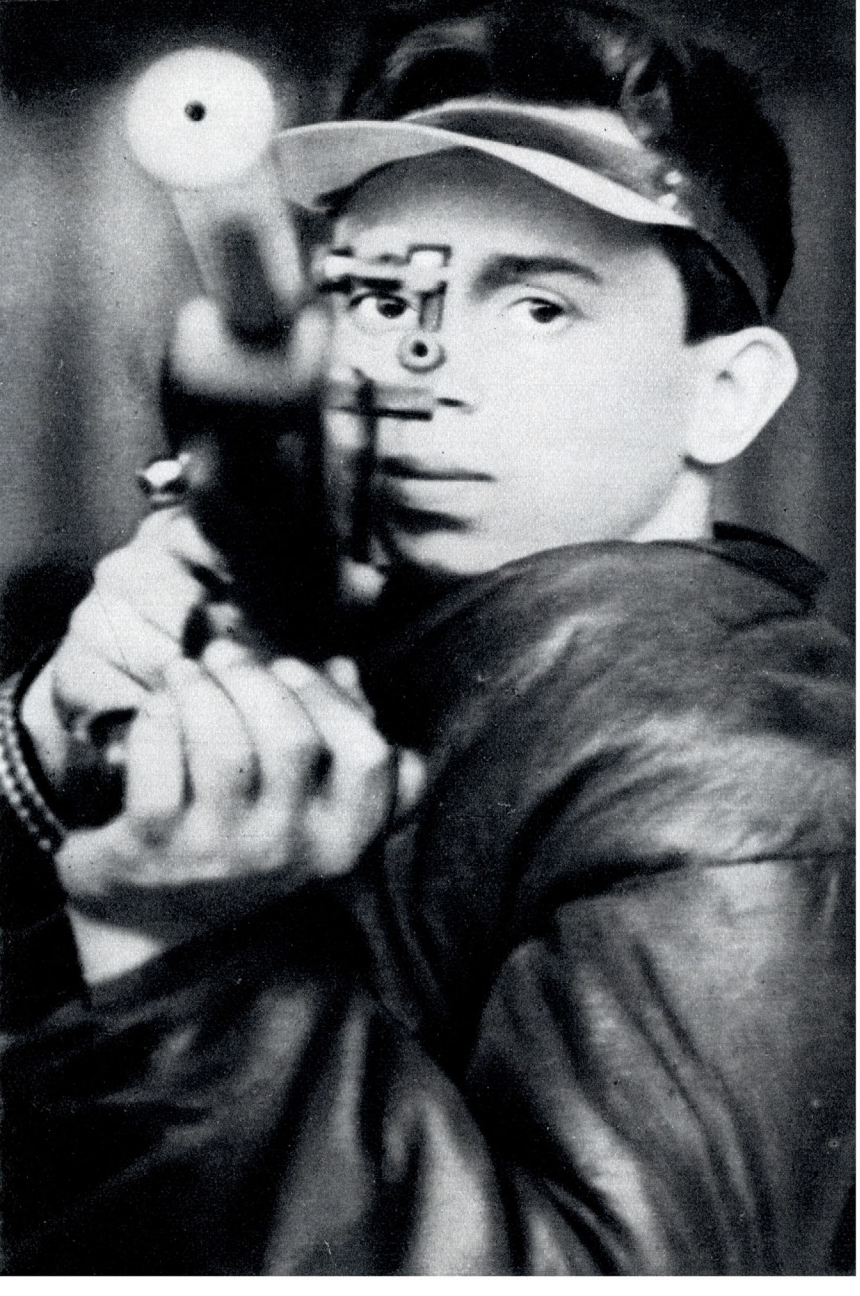
The rifle is a mass production model.

The rifle is furnished with a case and accessories for cleaning and lubrication.

High firing properties of the СМ-2 rifle made it quite popular among sportsmen.

SPORTING RIFLE

CM-2



The МЦ12-3 rifle is one of the new models which were designed in the past few years. This model was constructed on the basis of the МЦ12 rifle. It is designed for achieving highest results in firing at fixed targets at ranges up to 100 *m*.

The rifle is noted for its exceptionally high accuracy of fire.

The ammunition used with the rifle are 5.6-*mm* "Extra" target cartridges.

The heavy barrel manufactured with high precision is connected to the receiver by two guiding cylinders and thread. The length of the barrel is 750 *mm*.

The bolt is of a slide cylindrical type.

The rifle bore is locked by two locking lugs when turning the bolt body.

Cartridge cases are removed by the extractor on shifting the bolt to the rearward position.

The МЦ12-3 rifle has a trigger mechanism of a hair-trigger type whose functional diagram is considerably simpler as compared with the МЦ12 model. The trigger pull is adjustable within 35—200 *g*.

Specially-shaped stock made of walnut has a pistol grip.

Special palm rest for the left hand as well as a multi-purpose butt plate and conveniently shaped stock make the rifle a very handy weapon for firing from various positions.

The construction of sighting devices and the accessories set of the МЦ12-3 rifle are similar to those of the МЦ12 model.

The МЦ12-3 rifle is a hand-made weapon manufactured to order.

This rifle was used with great success by Soviet marksmen in competitive shooting. The rifle helped to establish many new records.

SPORTING MATCH RIFLE

МЦ 12-3

The 5.6-*mm* МЦ12 rifle belongs to a group of free match rifles; it is designed for achieving highest results in firing at fixed targets at ranges up to 100 *m*. The rifle is noted for its extremely high accuracy of fire.

The rifle fires 5.6-*mm* target rim-fire cartridges.

The heavy barrel manufactured with high precision is connected to the receiver by two guiding cylinders and thread.

The length of the barrel is 750 *mm*.

The rifle is provided with a slide type bolt.

The bore is locked by four locking lugs on turning the bolt handle.

Cartridge cases are withdrawn from the chamber by the extractor and are ejected outside when the bolt is shifted to the rearward position.

SPORTING MATCH RIFLE

МЦ 12

The aperture sight has replaceable sight-vanes. To introduce fine corrections in windage and elevation during firing the sight is provided with elevation and windage screws and knobs.

The replaceable foresights are of a ring or blade type.

The hair-trigger mechanism is adjustable within 35—200 *g*. The trigger creep can also be adjusted within 0.05—3 *mm*.

A specially-shaped stock with a pistol grip is manufactured of walnut, beech or birch.

The forearm carries the palm rest for the left hand and a swivel for the sling, the rear end face of the butt mounts the butt plate. The position of the palm rest, swivel and butt plate is adjustable.

The weight of the rifle is 6.25—6.5 *kg*.

The МЦ12 rifle is manufactured in mass production and hand-made models. The rifle is delivered in a cover with a set of accessories, foresights, sight-vanes and tools placed in a convenient and handsome case.

The МЦ12 rifle has been in production since 1952 and during this time it won great popularity among marksmen.

The rifle was successfully used by the leading sharp-shooters of the Soviet Union at various international shooting competitions.

During the World Championships in Caracas, Moscow and Cairo (in 1954, 1958, 1962) the Soviet national team firing from the МЦ12 rifles always won the first places, titles of world champions and the "Switzerland" challenge prize. Very high results were likewise achieved at the Olympic games.

The „СТРЕЛА-3" rifle is one of the new models of target rifles which have been recently designed in the Soviet Union. It is a free sporting match rifle. This model is used for achieving highest results in firing at fixed targets at ranges up to 100 *m*.

The heavy precision-made barrel is 730 *mm* long.

The specific feature of this model is that the barrel is secured to the forearm through a special bracket by four screws.

The ammunition used with the rifle are 5.6-*mm* high-quality target rim-fire cartridges "Extra". When "Extra" ammunition is used, the rifle has a very high accuracy of fire.

The slide bolt closes the bore with three locking lugs on turning the bolt handle.

Fired cartridge cases are withdrawn from the chamber by the extractor and are ejected outside when the bolt is shifted to the rearward position.

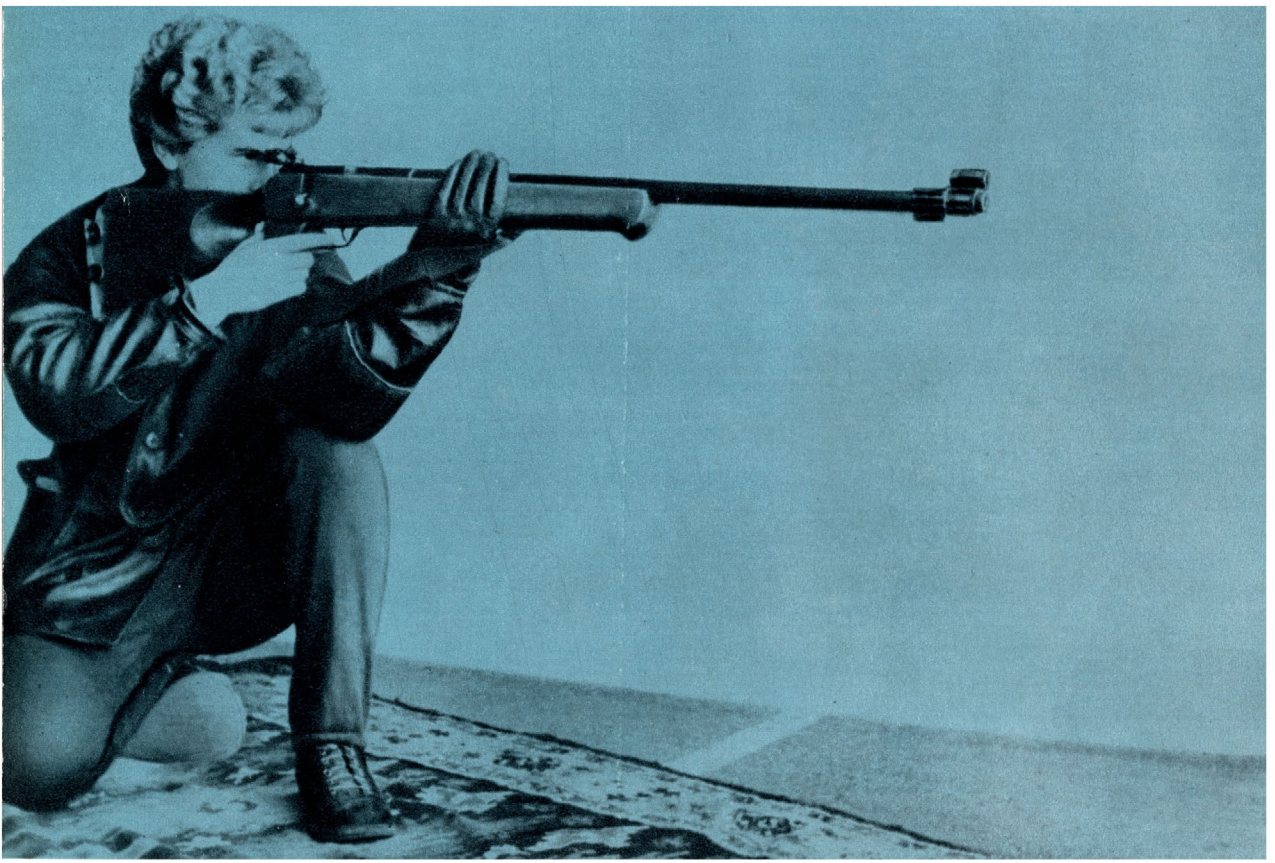
The construction of sights, trigger mechanism, bolt, the design and shape of stock and the set of accessories of the „СТРЕЛА-3" rifle are similar to those of the „СТРЕЛА-2" model.

The rifle weighs not more than 8 *kg*.

The „СТРЕЛА-3" sporting rifle is manufactured in small batches.

SPORTING MATCH RIFLE

„СТРЕЛА-3“



The „CTPEJIA-2" rifle, calibre 5.6 *mm*, is a free sporting match rifle. This model is used for sport shooting at fixed targets at ranges up to 100 *m*.

The rifle is noted for its high accuracy, stability of fire and flawless operation of the mechanisms.

The heavy barrel made with great precision is connected to the receiver by thread. In the muzzle portion of the barrel there is a foresight block to which replaceable foresights are attached. The length of the barrel is 730 *mm*.

The slide bolt closes the bore with three locking lugs on turning the bolt handle.

Fired cartridge cases are withdrawn from the chamber by the extractor and are ejected outside when the bolt is shifted to the rearward position.

The aperture-type sight enables fine corrections to be made in elevation and windage. The sighting radius is adjustable within 870—900 *mm*. The height of the sighting radius can also be adjusted.

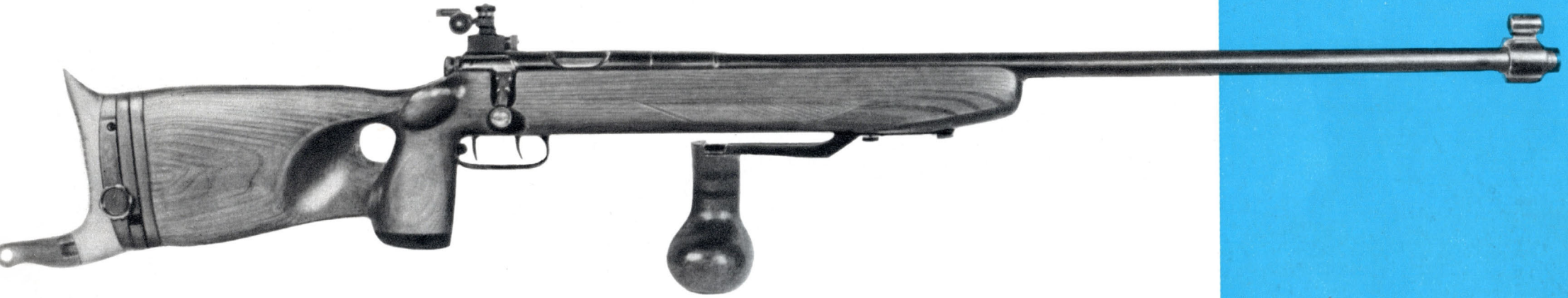
The hair-trigger mechanism has adjustable trigger pull within 20—1,500 *g* and trigger creep within 0.5—4 *mm*.

The walnut stock has a pistol grip with a cheek-piece, the butt being displaced to the right to make the rifle more handy for firing. The length of the butt is adjusted by means of pads.

The construction of the butt plate ensures its adjustment in the horizontal and vertical planes as well as the turning of the butt plate hook depending on the firing position and individual features of the marksman.

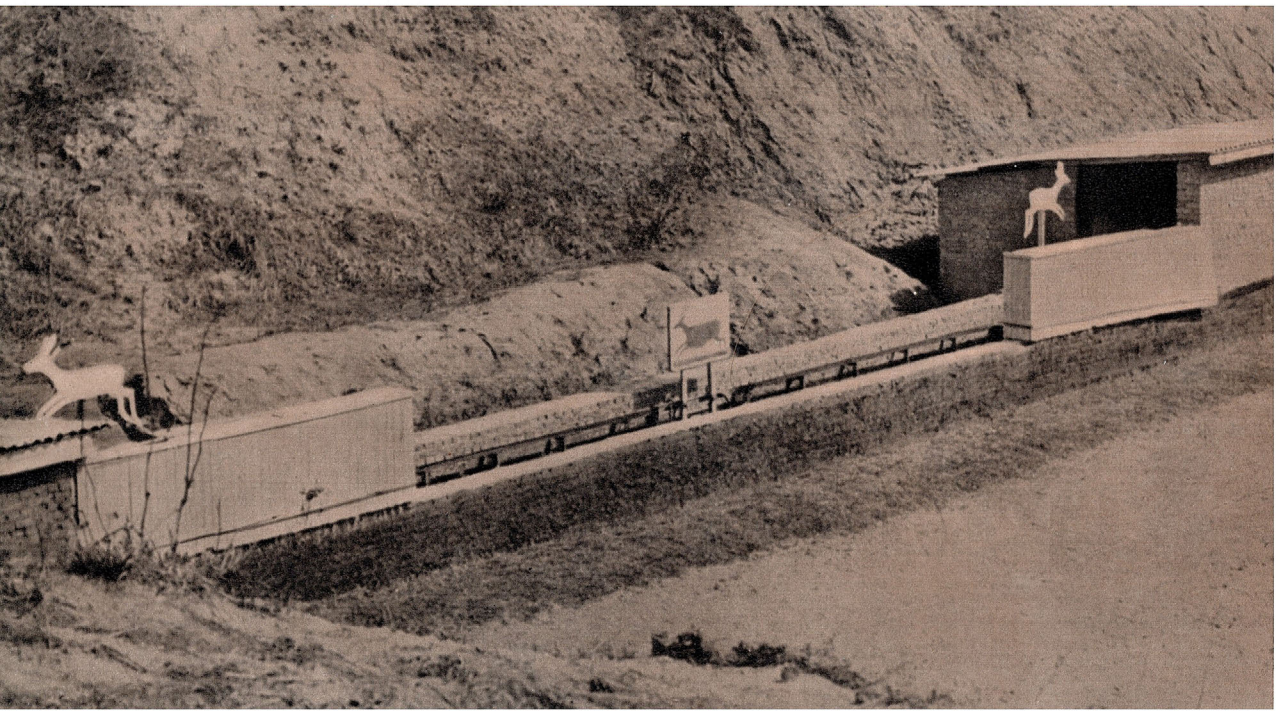
A swivel for the sling and a palm rest for the left hand are attached to the plate in the lower part of the forearm.

The rifle is a quantity production model. The rifle set includes cover, sling, palm rest, replaceable blade and ring foresights, sight-vanes for the rear sight as well as accessories for cleaning and lubrication.



SPORTING MATCH RIFLE

„СТРЕЛА-2“



The БК-2 single-shot sporting rifle is a modified version of the СМ-2 model; it is designed for firing at "Running roe" target at a range of 50 *m*.

The length of a specially-constructed barrel is 680 *mm*.

In the hands of an experienced marksman the БК-2 rifle guarantees high shooting results.

The rifle fires 5.6-*mm* target rim-fire cartridges.

The slide bolt locks the bore when turned in the forward position.

The trigger mechanism of the non-hair trigger type has adjustable trigger pull within 0.5—1.5 *kg* and trigger creep within 1—4 *mm*.

Cartridges are loaded into the chamber manually. Fired cartridge case or cartridge is pushed out of the chamber by the lever type extractor when the bolt is moving to the rearward position.

The aperture rear sight is micrometrically adjusted both in windage and elevation.

The sight is mounted in a special groove on the receiver and is capable of moving along the barrel axis. The sighting radius is within 780—810 *mm*.

The foresight which is shifted to the left and to the right depending on the direction of target movement can be adjusted in height.

The value of the foresight displacement is adjusted depending on the speed of target movement and the amount of lead.

A special type stock with a cheek-piece and pistol grip is manufactured of walnut or birch. The length of the butt is adjusted by means of pads.

The shape of the stock makes the rifle a very handy weapon for firing.

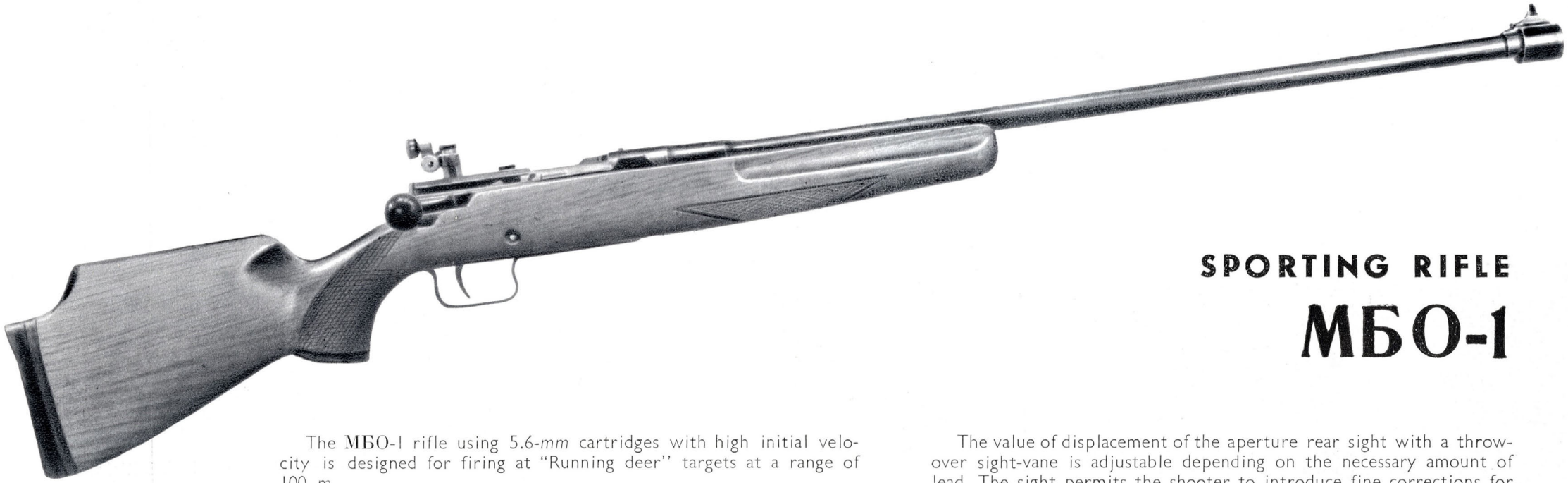
The weight of the rifle is not more than 4.5 *kg*.

The rifle is dependable in operation and is in permanent demand among sportsmen; it is a quantity produced weapon.

The rifle set includes a cover and accessories for cleaning and lubrication.

SPORTING RIFLE

БК-2



SPORTING RIFLE

МБО-1

The МБО-1 rifle using 5.6-*mm* cartridges with high initial velocity is designed for firing at "Running deer" targets at a range of 100 *m*.

The barrel made of high-quality steel is connected to the receiver by means of a guiding cylinder and thread. A band-type cowl is fitted above the barrel to bypass the stream of hot air when the barrel is heated. The length of the barrel is 730 *mm*.

The rifle is provided with a slide type-bolt.

The bore is locked by two locking lugs when the bolt head is turned due to the spiral groove in the frame.

The magazine capacity is 3 cartridges.

Cartridges are fed into the chamber manually.

Fired cartridge cases are withdrawn from the chamber by a lever type extractor when the bolt is shifted to the rearward position.

The construction of the trigger mechanism provides for the adjustment of the trigger pull within 0.9—1.5 *kg* and trigger creep — within 0.1—6 *mm*.

The value of displacement of the aperture rear sight with a throw-over sight-vane is adjustable depending on the necessary amount of lead. The sight permits the shooter to introduce fine corrections for windage and elevation. The sighting radius may be varied within 860—900 *mm*.

The length of the butt is adjusted by means of pads.

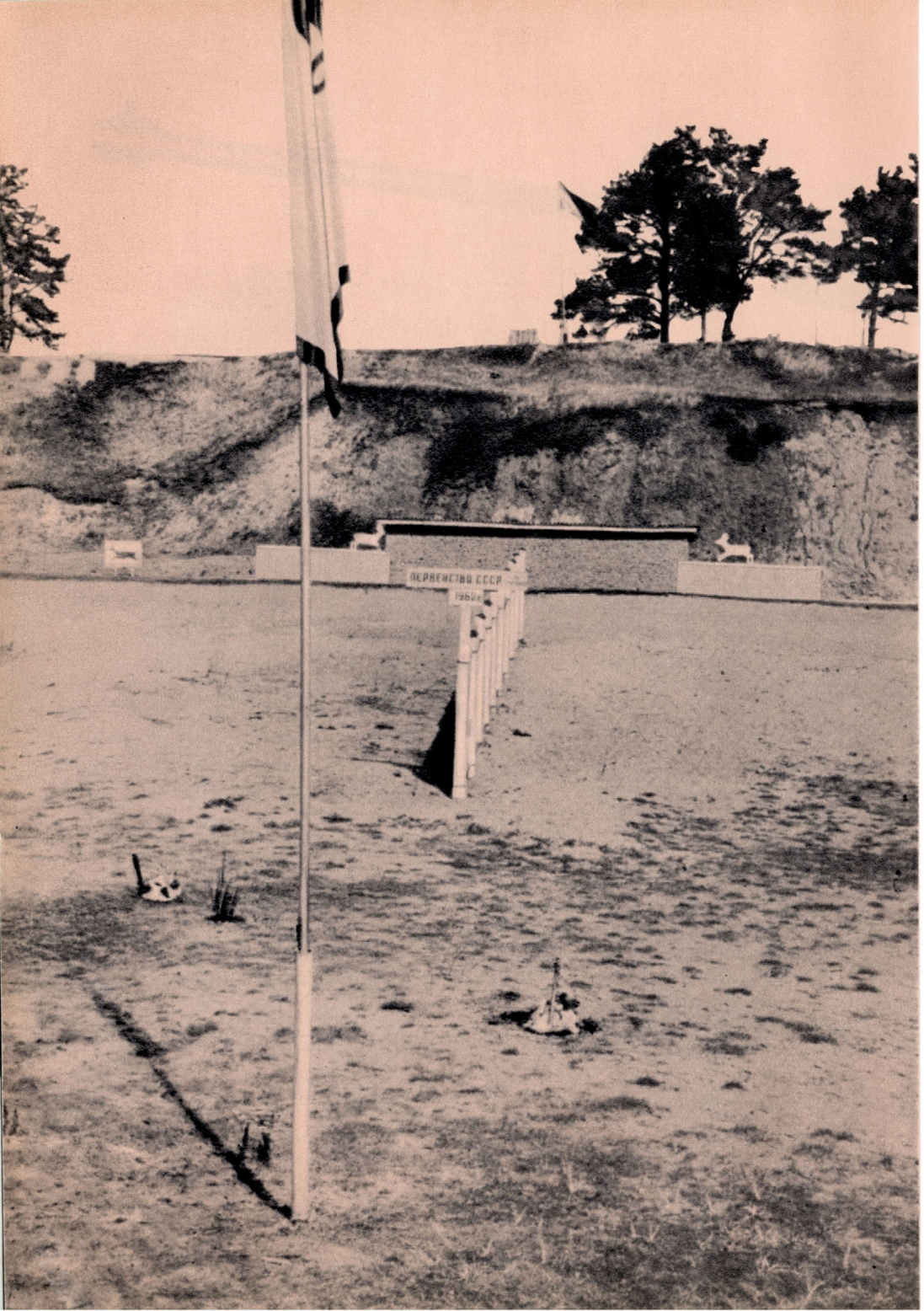
The walnut stock has a pistol grip with a cheek-piece. Special shape of the stock ensures a convenient position of the rifle for fast and accurate firing.

The weight of the rifle is not more than 4.5 *kg*.

The rifle is a mass production model.

The rifle set includes a cover, replaceable sight-vanes and foresights, anti-mirage cowl and accessories for cleaning and disassembling the rifle.

In the hands of an experienced marksman the МБО-1 rifle guarantees high results in shooting. At many important shooting competitions the МБО-1 rifle helped to establish new records and win the Krüger prize.



The МЦ80-1 rifle using 5.6-*mm* cartridges with high initial velocity is one of the new models which have been recently designed. It is used for firing at fast moving targets "Running deer" at a range of 100 *m*.

The barrel made of high-quality steel is connected to the receiver by two guiding cylinders and thread.

A band-type cowl is fitted above the barrel to bypass the stream of hot air when the barrel is heated. The length of the barrel is 715 *mm*.

The slide bolt of the rifle does not turn when locking the barrel. The bore is locked due to the misalignment of the bolt.

The magazine capacity is 3 cartridges.

Cartridges are fed into the chamber as the bolt moves to the forward position.

The trigger and firing mechanisms are mounted on a separate base plate.

SPORTING RIFLE

МЦ 80-1

The trigger pull is adjustable within 1.0—1.5 *kg*, the trigger creep — within 1.0—6 *mm*.

The aperture-type rear sight can be displaced in the vertical and horizontal planes. The sighting radius is variable within 810—900 *mm*.

The butt length is adjusted by means of pads.

The stock made of walnut has a pistol grip and cheek-piece. The stock shape ensures good handling qualities for fast firing.

The weight of the rifle is not more than 4.5 *kg*.

This model is made to order. The rifle set includes a cover, replaceable sight-vanes and foresights, anti-mirage cowl and accessories for cleaning and disassembling the rifle.

The МЦ80-1 rifle was used with great success by Soviet "Running deer" shooters. During the World Championship in 1962 one of the Soviet sportsmen who fired from this rifle won the first place in single-shot and double-shot events.

The „ЗЕНИТ-4" rifle is one of the new models of match weapons calibre 6.5 *mm* which have been designed recently in the USSR. It is a free sporting match rifle. This model is designed for firing 6.5-*mm* target cartridges at a range of 300 *m*.

As compared with the 7.62-*mm* „ЗЕНИТ-3" rifle the force of recoil of the „ЗЕНИТ-4" model is much weaker; this considerably improves the rifle service characteristics especially for fulfilling such complicated exercises as ПВ-6 in the course of which 120 recorded shots are made.

The heavy high-precision barrel is joined with the receiver by means of thread. The length of the barrel is 760 *mm*. The rifle bore is locked by three locking lugs of the bolt body and the respective lugs of the receiver.

The slide bolt is turned when the bore is being locked.

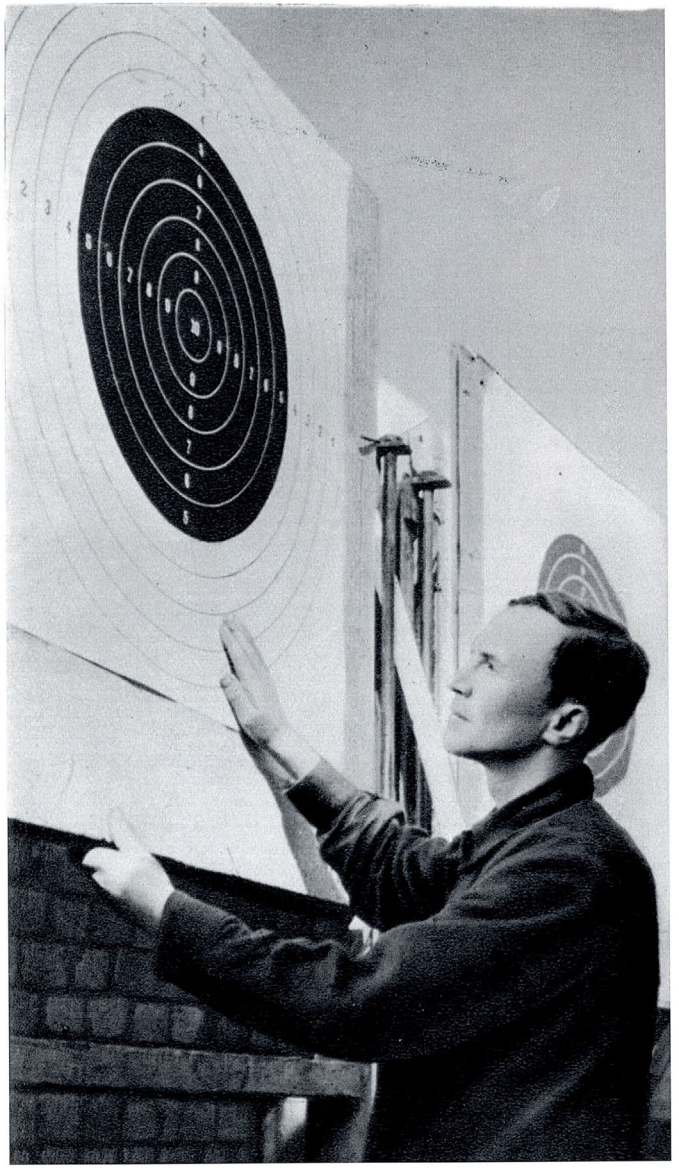
Cartridge cases are removed from the chamber by an extractor and are ejected outside when the bolt is moving to the rearward position.

The outward appearance, construction of sighting equipment, the trigger mechanism, bolt, design of stock, barrel fastening, weight and linear characteristics as well as the set of accessories of the „ЗЕНИТ-4" rifle are similar to those of the „ЗЕНИТ-3" model.

The „ЗЕНИТ-4" rifle is a quantity produced weapon.

SPORTING MATCH RIFLE

„ЗЕНИТ-4“



The МЦ13-2 model is a high-class free sporting match rifle. It is designed for record firing at fixed targets at a range of 300 *m*.

The heavy barrel made with high precision is connected to the receiver by two guiding cylinders and thread. The length of the barrel is 760 *mm*.

The rifle fires 7.62-*mm* target cartridges.

The slide bolt is turned when the barrel is locked. Locking is ensured by two locking lugs.

The firing mechanism is fitted in the bolt. The firing pin is cocked on shifting the bolt to the forward position.

The hair-trigger mechanism is provided with fine adjustment of the trigger pull within 35—200 *g* and the trigger creep — within 0.05—3 *mm*.

Cartridges are fed into the barrel chamber manually. Fired cartridge cases are withdrawn from the chamber by the extractor and are ejected outside by the receiver insert when the bolt is shifted to the rearward position.

The aperture-type rear sight has replaceable sight-vanes.

To ensure better conditions for sighting provision is made for an anti-mirage cowl which is secured on the barrel.

The foresights, ring or blade, are replaceable.

A specially-shaped stock has a pistol grip with a cheek-piece, multi-purpose adjustable butt plate and a horseshoe-shaped palm rest for the left hand, all these features making firing this weapon more convenient from any position. The stock is made of walnut.

The МЦ13-2 rifle is a high-accuracy weapon, it is dependable in operation and handy for firing.

The weight of the rifle does not exceed 8 *kg*.

The МЦ13-2 rifle is a hand-made model, the stock being adjusted for each shooter individually.

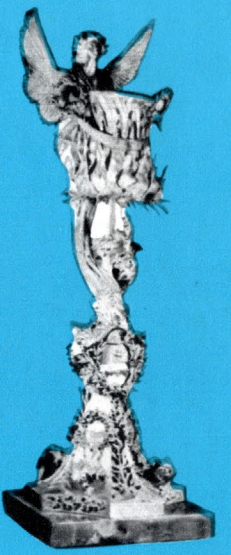
There is a similar model МЦ13-1 in mass production the stock of which is not adjusted individually.

The МЦ13-1 rifle has been produced since 1952 and was successfully used by Soviet top sharp-shooters at various important competitions.

Firing from МЦ13 rifles at the World Championships in 1954, 1958 and 1962 the Soviet national team won the first places and the titles of world champions and each time was awarded the prize of Argentina.

SPORTING MATCH RIFLE

МЦ 13-2



The „ЗЕНИТ-3" model is a free sporting match rifle. It is designed for sport shooting with 7.62-*mm* target ammunition at ranges up to 300 *m*.

The heavy barrel made with high precision is connected to the receiver by thread. In the front portion of the barrel there is a foresight block to which replaceable foresights are attached. The length of the barrel is 760 *mm*.

The rifle bore is locked by three locking lugs of the bolt body and the respective lugs of the receiver.

The slide bolt is turned when the barrel is locked.

The hair-trigger mechanism is adjustable within 20—1,500 *g*. The trigger creep is adjusted within 0.5—4 *mm*. The effort required to cock the trigger mechanism is within 2—5 *kg*.

Fired cartridge cases are withdrawn from the chamber by the extractor and are ejected outside when the bolt is shifted to the rearward position.

The aperture-type rear sight enables the shooter to introduce fine corrections in elevation and windage. The sighting radius is adjustable within 900—930 *mm*.

A specially-shaped stock has a pistol grip with a cheek-piece, the butt being set off to the right to make the rifle more handy for firing from any position. The stock is made of birch or walnut.

A palm rest for the left hand is secured in the forearm plate guides, the rear end face of the butt carrying a butt plate. The position of the butt plate, palm rest, swivel as well as the butt length are adjustable.

The weight of the rifle does not exceed 8 *kg*.

The „ЗЕНИТ-3" rifle is a quantity production model, it is delivered in a cover with a set of ring and blade foresights of various sizes, replaceable sight-vanes, palm rest and accessories for disassembly and cleaning.

The „ЗЕНИТ-3" rifle is very popular with marksmen. A Soviet sportsman who fired from this rifle won the title of the Champion of the USSR.

SPORTING MATCH RIFLE

„ЗЕНИТ-3“

The „БИАТЛОН" sporting rifle is designed for use in modern winter biathlon including 20-*km* ski race and shooting at semi-circular targets installed at ranges of 100, 150, 200 and 250 *m*. If target ammunition is used, this rifle in the hands of an experienced marksman guarantees 100% of hits from all lines; the rifle stands out for a remarkably high accuracy and stability of fire and flawless operation of all its mechanisms.

The capacity of the rifle magazine is 5 cartridges. The construction of the magazine ensures quick reloading by means of a clip, which is a very important feature for the biathlon.

To protect the rifle bore, foresight and rear sight from shocks and penetration of snow the weapon is provided with special quick-release protectors.

The barrel length is 730 *mm*.

The slide bolt is turned when the barrel is locked. Locking is effected by two locking lugs.

The stock has a pistol grip with a cheek-piece.

A base for the soft rest with shoulder belts is secured in the front part of the forearm. The rear end face of the stock carries a butt plate with a hook whose position can be adjusted in height. To absorb the force of recoil a pad made of elastic reinforced rubber is attached to the butt plate.

The trigger is of a two-stage type with non-adjustable trigger pull which is equal to 1.4—1.6 *kg*.

The aperture sight enables the shooter to introduce fine corrections in elevation and windage.

The sighting radius is 875 *mm*.

The weight of the rifle without slings does not exceed 4.5 *kg*.

The „БИАТЛОН" rifle is a mass production model manufactured in two variants: БИ-7.62 (calibre 7.62 *mm*) and БИ-6.5 (calibre 6.5 *mm*) which are quite similar in construction, the only difference being that the БИ-6.5 rifle has weaker recoil and therefore higher service characteristics.

The rifle set includes a cover, replaceable foresights and sight-vanes, sling and shoulder belts, anti-mirage cowl as well as accessories for cleaning and disassembly.

The БИ-7.62 rifle was successfully used by top Soviet sportsmen at World Championships where the national team of the USSR repeatedly won the first team and individual places.

SPORTING RIFLE

„БИАТЛОН“
БИ - 7,62

The МЦУ pistol is designed for sport shooting at quickly disappearing silhouette targets set at a range of 25 *m*.

The pistol is reloaded automatically due to the recoil of the freely moving slide. Cartridges are delivered into the receiver feed opening by the feed rib.

The magazine holding 6 cartridges is fitted in the grip.

To improve the stability of the weapon during firing the pistol is provided with an effective muzzle brake-compensator. To ensure proper balance and stability during firing provision is made for installing balancing weights.

The sights enable the shooter to introduce fine corrections in windage and elevation.

The grip is simple without individual adjustment.

The pistol weighs 1 *kg*. The sighting radius is 190 *mm*. The length of the barrel is 160 *mm*.

The trigger pull is within 0.5—1.0 *kg*.

The pistol set includes: magazine, balancing weights, accessories for disassembly and cleaning and some spare parts.

The pistol complete with accessories is laid in a separate case convenient for shipping and service.

The auto-loading pistol is a quantity production weapon manufactured in two models:

— model МЦУ for firing 5.6-*mm* short cartridges;

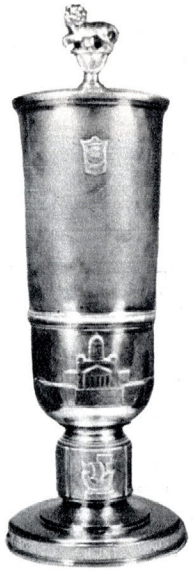
— model МЦ for firing 5.6-*mm* target rim-fire cartridges.

The МЦ pistol is designed for shooting at round and silhouette targets at a range of 25 *m*.

Both МЦ and МЦУ models enjoy wide popularity among sportsmen.

MATCH
AUTO-LOADING
PISTOL

МЦУ



The МЦ1-2 auto-loading pistol, calibre 5.6 *mm*, is designed for rapid shooting in shooting galleries at quickly disappearing silhouette targets at a range of 25 *m*.

The ammunition used with the pistol are 5.6-*mm* target pistol short rim-fire cartridges.

The barrel is pressed on the pistol receiver and is secured in it by a pin.

The automatic operation of the pistol is based on the utilization of the recoil force of the freely moving slide.

To increase the stability of the pistol during firing there is a massive jacket in the front part of the barrel.

The pistol has a six-shot magazine fitted in the grip. Cartridges are fed from the magazine into the barrel chamber automatically while the slide is moving to the forward position under the action of the return spring.

The barrel is locked by the mass of the freely moving slide and the return spring.

After a shot is fired the recoiling parts are smoothly slowed down by a special shock-absorber mounted on the rod.

Cartridge cases are removed from the cartridge chamber by the extractors and are ejected outside when the slide is moving to the rearward position.

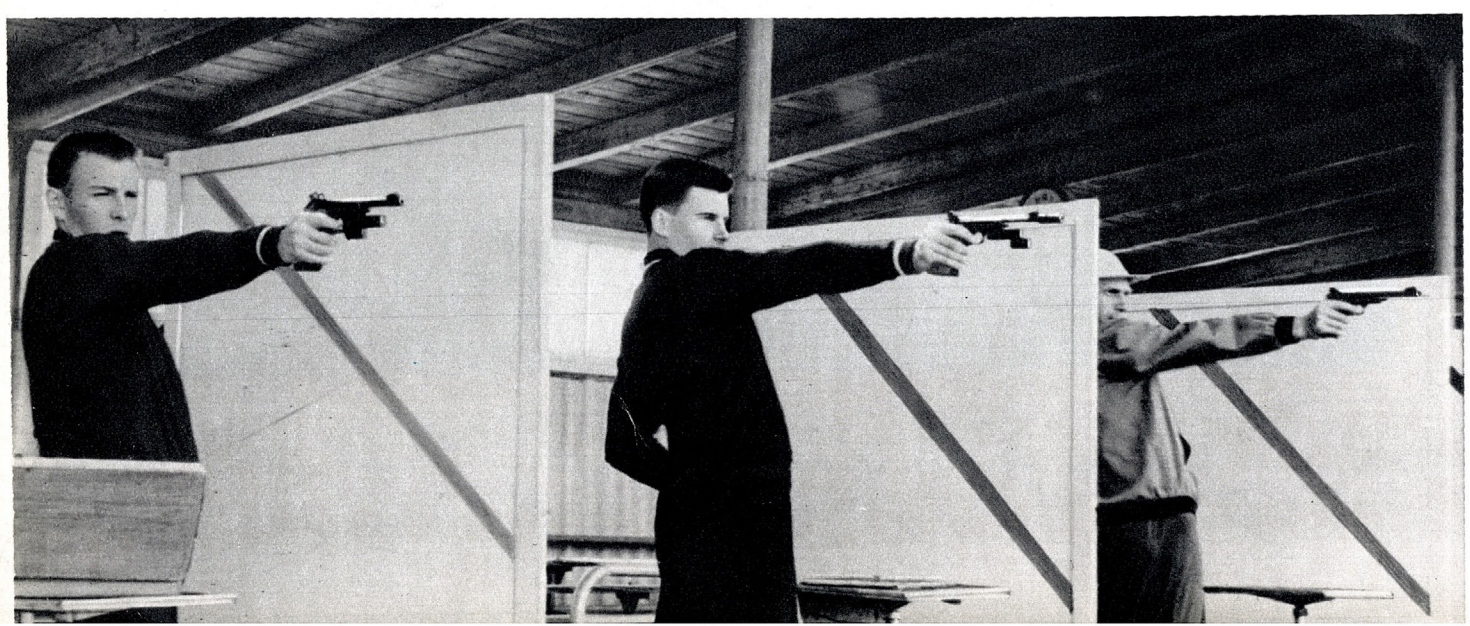
The trigger pull is adjustable within 100—850 *g* and the trigger creep — within 3—5 *mm*. The position of the trigger can also be adjusted. The hammer is cocked while the slide is travelling to the rearward position.

The jacket carries a special sighting device to correct the position of the sighting line. The front and rear sights are replaceable. A specially-shaped (orthopedic) grip is made of walnut. The construction of the grip allows for individual adjustment to the shooter's hand.

The pistol weighs 1.1—1.2 *kg*. The sighting radius is 276 *mm*. The length of the barrel is 160 *mm*.

The pistol is manufactured in small batches on orders from customers.

The Soviet team of marksmen has won the challenge prize of Helsinki for the best results gained in silhouette shooting.



MATCH
AUTO-LOADING
PISTOL

МЦ 1-2

The ИЖ-1 model is a free match pistol for sport shooting at a range of 50 *m*. The ammunition used with the pistol are 5.6-*mm* target rim-fire cartridges.

The pistol bore is locked by the tipping slide. The slide lever is housed in the grip. The firing pin is cocked on opening the slide.

The pistol has a trigger mechanism with an adjustable sensitive trigger. The trigger pull can be adjusted within 7—112 *g*. The trigger creep is adjustable within 0.1—1 *mm*.

The sighting devices provide for fine elevation and windage corrections. The sighting radius is equal to 400 *mm*.

The rear sight and the foresight are replaceable.

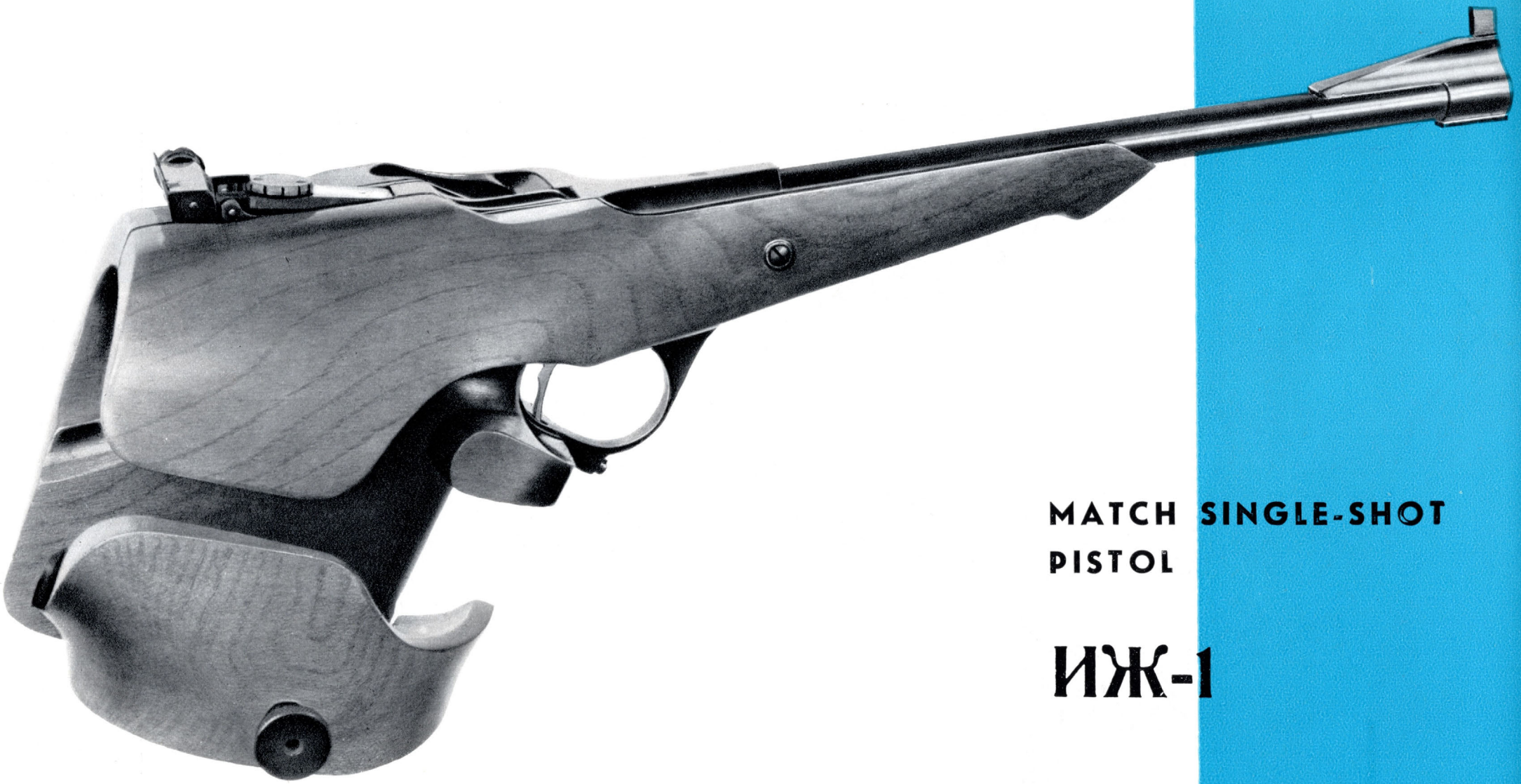
A specially-shaped (orthopedic) grip has an adjustable hand shelf.

The pistol weighs 1.2 *kg*. The length of the barrel is 280 *mm*.

The pistol is manufactured in limited quantities on orders from customers. The pistol set includes accessories and tools for disassembly and cleaning. The pistol and all accessories are laid in a case.

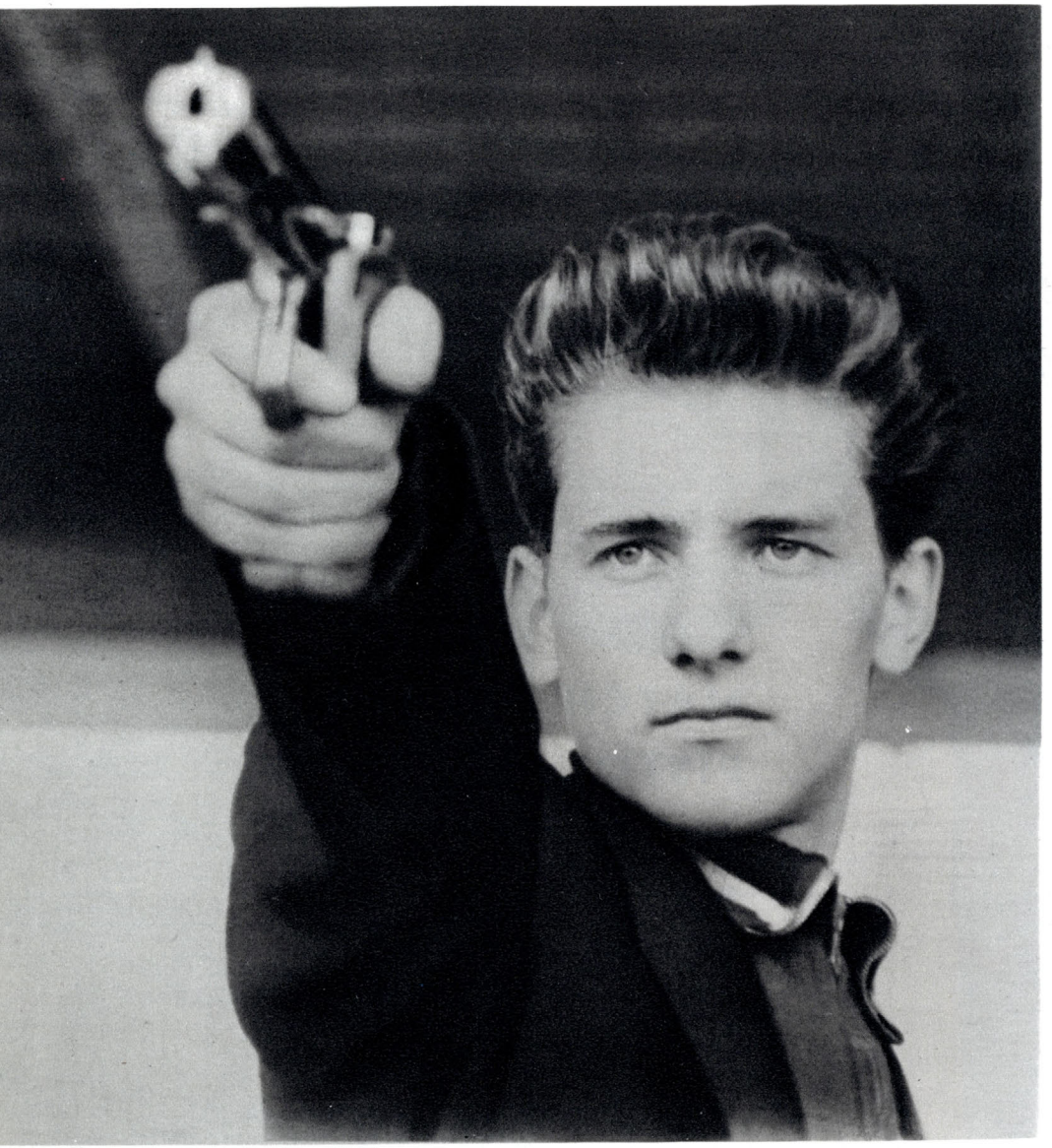
The ИЖ-1 is very popular with sportsmen and was used with great success at international shooting competitions.

During the XVIIth Olympic Games in Rome in 1960 one of the Soviet sportsmen who fired from the ИЖ-1 pistol won the first place and a gold medal.



MATCH SINGLE-SHOT
PISTOL

ИЖ-1



The МЦ2-3 pistol is a free match model used for record-setting shooting at fixed targets in shooting galleries.

The barrel manufactured with the highest degree of precision is connected to the receiver by two guiding cylinders and thread. The length of the barrel is 270 *mm*.

The pistol fires 5.6-*mm* target rim-fire cartridges.

The pistol is noted for its high and stable accuracy of fire.

Cartridges are loaded into the barrel chamber by hand.

The longitudinally travelling slide closes the pistol bore by means of two locking lugs when the slide head is turned.

Cartridge cases are removed by the extractor when the slide is shifted to the rearward position.

The pistol has a trigger mechanism with a sensitive trigger. The trigger pull is equal to 15—25 *g*. The trigger mechanism is cocked by turning the trigger guard.

The firing mechanism with a safety is housed in the slide. The firing pin is cocked on shifting the slide to the forward position. The sighting devices allow for fine corrections in windage and elevation.

The foresight and rear sight are replaceable.

The specially-shaped (orthopedic) grip provided with an adjustable hand shelf is made of walnut.

The pistol has a safety to prevent firing with the barrel unlocked.

The weight of the pistol is 1.25—1.5 *kg*. The sighting radius is 355 *mm*.

The МЦ2-3 pistol is manufactured in small batches and is considered to be one of the best models of this class. Soviet sportsmen established many new records using this pistol. The national team of the USSR always won the first places with the Cup of Lyons at the World Championships of 1954—1962.

MATCH SINGLE-SHOT
PISTOL

МЦ 2-3

The МЦ55-1 pistol is a recently-designed model. The pistol is designed for sport shooting at fixed targets in shooting galleries.

The pistol fires 5.6-*mm* target rim-fire cartridges.

This model stands out for its highly accurate and stable fire, convenience and stability during firing.

The barrel is manufactured with utmost precision. Its length is 280 *mm*.

The barrel is locked by the tipping slide, the slide lever being mounted under the barrel.

The trigger mechanism is provided with an adjustable sensitive trigger. The trigger pull can be adjusted within 10—100 *g*.

Cartridges are loaded into the barrel chamber by hand.

Fired cases are withdrawn from the barrel chamber by the extractor and are ejected outside by the ejector on shifting the slide to the rearward position.

The sighting devices enable the shooter to make fine corrections of the sighting line position. The sighting radius is adjustable from 350 to 400 *mm*.

The rear sight and foresight are replaceable.

A specially-shaped grip with an adjustable hand shelf is made of walnut.

The pistol has a safety to prevent firing with the barrel unlocked.

The weight of the pistol is 1.0 *kg*.

The pistol is manufactured in small batches on orders from customers.

MATCH SINGLE-SHOT PISTOL

МЦ 55-1

The ТОЗ-35 free match pistol is a new model designed in the Soviet Union in the period of 1961—1962; it is used for sport firing at a range of up to 50 *m*.

The ammunition used with the pistol are 5.6-*mm* target rim-fire cartridges.

The pistol bore is locked by the tipping slide, the slide lever being fitted in the grip.

The firing pin is cocked and the fired case is extracted on opening the slide.

The pistol has a hair-trigger mechanism with the trigger pull being adjustable within 10—100 *g*. The original construction of the trigger mechanism enables the trigger to be set in any position convenient for the shooter.

The sight allows for fine corrections both in windage and elevation.

The rear sight and foresight are replaceable.

A specially-shaped (orthopedic) grip with an adjustable hand shelf is made of walnut.

The weight of the pistol is 1.3 *kg*, the barrel length being 300 *mm*.

The sighting radius is equal to 370 *mm*.

The pistol is a mass production model. It is furnished with a set of tools and accessories. The pistol with accessories is laid in a case.

The characteristic feature of the ТОЗ-35 pistol is good stability in firing and high fire accuracy.

Although the pistol was constructed only a short time ago, it won undeniable popularity with sportsmen.

At the World Championship in Cairo in 1962 the ТОЗ-35 pistol proved a great success.

MATCH SINGLE-SHOT PISTOL

T03-35

The pistol firing 4.5 *mm* lead bullets is designed for training of sportsmen in shooting galleries at short ranges of up to 10 *m*.

A shot is fired due to the energy of expanding carbon dioxide contained in a standard cylinder. One cylinder provides sufficient amount of gas for making 50 shots.

The pistol is loaded through the receiver opening, the bullet being pushed into the bore by the feed rib.

The original construction of the valve assembly ensures precise, dosing of gas required for making a shot. In this pistol the moving parts do not strike sharply against each other because of their small mass, which is a great advantage of this model, over the existing air weapons.

The sight enables the shooter to make corrections in windage. The sighting radius is 254 *mm*.

The trigger mechanism is of an adjustable type: the trigger creep is adjusted within 0.2—1.2 *mm*, and the trigger pull — within 500—700 *g*. The position of the trigger is also adjustable.

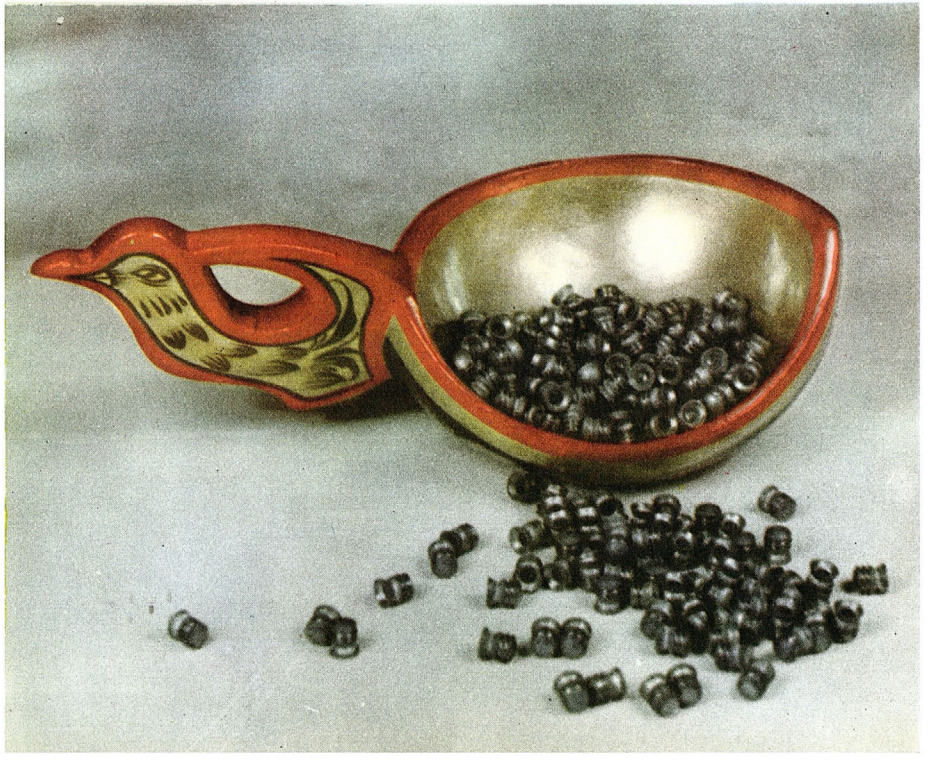
The pistol has a high and stable fire accuracy, handsome appearance and is convenient in service.

The weight of the pistol is 800 *g*, the barrel length being 200 *mm*.

The pistol is manufactured in limited quantities.

SPORTING GAS-CYLINDER PISTOL

МЦ 100-2



The rifle is designed for training of sportsmen as well as for shooting competitions at ranges up to 25 *m*.

The rifle fires 4.5-*mm* lead bullets.

The rifle has a stock with a pistol grip and cheek-piece, adjustable aperture sight with replaceable foresights and sight-vanes, trigger mechanism with adjustable trigger pull and creep. The trigger pull is adjustable within 300—1,200 *g*. The sighting radius can be adjusted within 770—800 *mm*.

By its weight and linear characteristics and by the shape of stock it resembles free sporting small-calibre rifles.

As distinct from other rifles in the МЦ110-2 model the cocking effort has been considerably reduced and it is equal in this model to 5—8 *kg*. The feed rib is interlocked with the cocking lever. The obturation of the piston is ensured by two metal rings which greatly increase the service life of the rifle.

The rifle is a convenient weapon for firing from various positions, it has high velocity of bullets (150 *m sec*) and high fire accuracy.

The weight of the rifle does not exceed 5 *kg*. The length of the barrel is 400 *mm*.

The use of this rifle makes the initial training of sportsmen a simple matter.

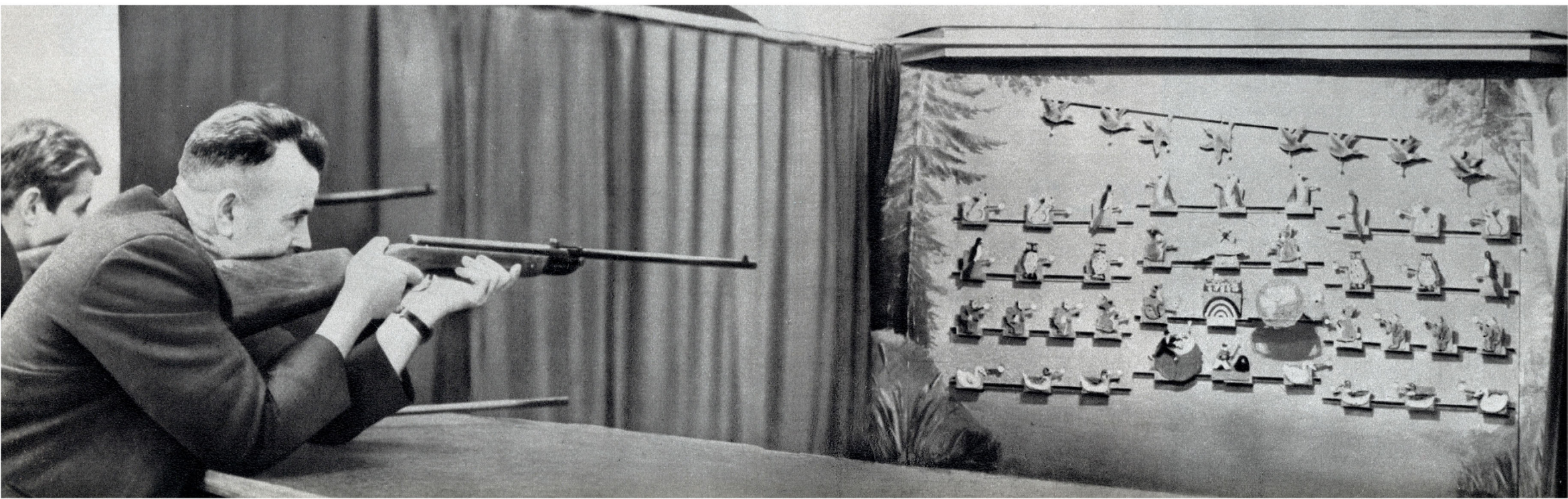
The rifle is manufactured in small batches.

SPORTING AIR RIFLE

МЦ 110-2

SPORTING
GAS-CYLINDER RIFLE

МЦ 110-1



The rifle is designed for training shooting at short ranges up to 15 *m*. The rifle fires due to the energy of expanding carbon dioxide contained in a standard cylinder housed in the bolt chamber. One cylinder provides sufficient amount of gas for making 50 shots.

The rifle fires lead cylindrical or round 4.5-*mm* bullets.

The trigger mechanism is of non-hair-trigger type with adjustable trigger pull and creep. The trigger creep is adjusted within 0.5—2.5 *mm*, the trigger pull — within 400—900 *g*. The trigger mechanism is cocked manually by pulling the bolt to the rearward position.

The open-type sight is provided with adjustable sight leaf.

The stock made of birch has a hand rest and cheek-piece.

The rifle is noted for excellent accuracy of fire.

The rifle weighs 2.5 *kg*. The sighting radius is 440 *mm*. The length of the barrel is 200 *mm*.

The advantages of the МЦ110-1 rifle as compared with lever-type air rifles are slight reloading effort, high rate of fire and convenience in service.

The rifle is a mass production model.

TABLE OF BASIC CHARACTERISTICS OF RIFLED SPORTING WEAPONS

Model	Calibre, *mm*	Weight, *kg*	Length of barrel, *mm*	Number of rifling grooves	Method of locking	Type of trigger mechanism	Trigger pull	Type of sight	Sighting radius, *mm*	Dispersion diameter, *cm*	Range	Stock	Type of cartridge
ТОЗ-8М	5.6	3—4	600—640	4	By turning bolt handle	Non-hair trigger	800—2,000	Open, sector	550—590	5.0	50	Birch, half-pistol, without cheek-piece	5.6-*mm* sport hunting with steel shell or target 5.6-mm rim fire
ТОЗ-12	5.6	3—4	600—640	4	Ditto	Ditto	800—2,000	Aperture	750	5.0	50	Ditto	
СМ-2	5.6	4.5	680	6	By one locking lug	„	500—1,500	Ditto	780—870	2.0	50	Birch, half-pistol with cheek-piece	
МЦ12-3	5.6	6.5	750	6	By two locking lugs	Hair trigger	35—200	„	830—860	1.4	50	Walnut, half-pistol, with cheek-piece and multipurpose butt plate	5.6-*mm* target "Extra"
МЦ12	5.6	6.5	750	6	By four locking lugs	Ditto	35—200	„	830—860	1.8	50	Walnut, pistol, with cheek-piece and ordinary butt plate and hook	5.6-*mm* target
„СТРЕЛА-3"	5.6	Not more than 8	730	6	By three locking lugs	„	20—1,500	„	870—900	1.6	50	Ditto	5.6-*mm* target "Extra"
„СТРЕЛА-2"	5.6	Not more than 8	730	6	Ditto	„	20—1,500	„	870—900	1.6	50	„	5.6-*mm* target
БК- 2	5.6	4.5	680	6	By one locking lug	Non-hair trigger	500—1,500	„	780—810	2.0	50	Birch, half pistol with cheek-piece	5.6-*mm* target
МБО-1	5.6	4.5	730	6	By two locking lugs	Ditto	900—1,500	Aperture with throw-over sight-vane	860—900	8	100	Walnut, pistol, with cheek-piece	5.6-*mm*, high initial velocity
МЦ80-1	5.6	4.5	715	6	By bolt misalignment	„	1,000—1,500	Aperture	810—900	8	100	Ditto	5.6-*mm*, high initial velocity
„Зенит-4"	6.5	Not more than 8	760	4	By three locking lugs	Hair trigger	20—1,500	Aperture	900—930	13	300	Walnut, pistol, with cheek-piece, butt plate and hook	6.5-*mm* target

Model	Calibre, *mm*	Weight, *kg*	Length of barrel, *mm*	Number of rifling grooves	Method of locking	Type of trigger mechanism	Trigger pull	Type of sight	Sighting radius, *mm*	Dispersion diameter, *cm*	Range	Stock	Type of cartridge
МЦ13-2	7.62	Not more than 8	760	4	By two locking lugs	Ditto	35—200	Ditto	900—930	9.0	300	Walnut, pistol, with cheek-piece and multi-purpose butt plate	7.62-*mm* target
„Зенит-3“	7.62	Not more than 8	760	4	By three locking lugs	„	20—1,500	„	900—930	13	300	Walnut or birch, pistol	7.62-*mm* target
БИ-7.62	7.62	4.5	730	4	By two locking lugs	Non-hair trigger	1,400—1,600	„	875	15	300	Birch pistol, with cheek-piece and hook	7.62-*mm* target
МЦУ	5.6	1.0	160	6	By free slide	Ditto	500—1,000	Open, adjustable	190	4.5	25	Ordinary, without individual adjustment	5.6-*mm* target, short
МЦ1-2	5.6	1.2	160	6	Ditto	„	100—850	Ditto	276	4.5	25	Walnut, orthopedic, with individual adjustment	5.6-*mm* target, short
ИЖ-1	5.6	1.2	280	6	By tipping slide	Hair trigger	7—100	Open	400	2.5	50	Walnut, orthopedic, with adjustable hand shelf	5.6-*mm* target
МЦ2-3	5.6	1.5	270	6	By two locking lugs	Ditto	15—25	Open, adjustable	355	2.5	50	Ditto	5.6-*mm* target
МЦ55 1	5.6	1.0	280	6	By tipping slide	„	10—100	Ditto	350—400	2.5	50	„	5.6-*mm* target
ТОЗ-35	5.6	1.3	300	6	Ditto	„	10—100	„	370	2.5	50	„	5.6-*mm* target
МЦ100-2	4.5	0.8	200	12	By pistol bolt	Non-hair trigger	500—700	Open	254	2.5	10	Walnut or plastic, with thumb rest	4.5-*mm* lead bullets
МЦ110-2	4.5	5	400	12	By cylindrical feed rib	Ditto	300—1,200	Aperture	770—800	1.2	10	Walnut, pistol, with cheek-piece	4.5-*mm* lead bullets
МЦ110-1	4.5	2.5	200	12	By turning insert	„	400—900	Open, adjustable in elevation	440	1.5	10	Birch, with cheek-piece	4.5-*mm* lead bullets

HUNTING CARTRIDGES

The Soviet industry puts out various kinds of cartridges for many purposes. Depending on the design and purpose the ammunition may be classified as bullet and shot cartridges.

There are shot cartridges for smooth-bore guns 12, 16, 20, 28 and 32 gauges. The bullet ammunition for rifled weapons includes 5.6-, 6.5-, 8.2-, and 9-*mm* cartridges. These cartridges by their ballistic properties and killing effect satisfy the requirements of professional and sport hunting of all kinds of small, medium and big animals and other game.

According to the method of igniting the powder charge cartridges are divided into rim-fire and central-fire ammunition.

Rim-fire cartridges having relatively low initial velocity (320 *m/sec*) are used for professional hunting of small fur animals and birds when shooting at a range of up to 100 *m*. To a large degree rim-fire ammunition is used for sporting purposes.

Rim-fire ammunition includes 5.6 *mm* sport-hunting cartridges with varnished steel cartridge cases of the 1st and 2nd categories which differ from each other by the fire accuracy. For the information on these cartridges see Chapter V "Sporting Cartridges" of the present Catalogue.

Central-fire cartridges having much higher initial velocity of bullets, twice or three times as high as that of the rim-fire ammunition, are used for big game hunting.

As a rule, central-fire cartridges carry soft-nosed bullets which get deformed upon impact thus producing an increased killing and stopping effect, this being especially important when hunting big predatory animals.

The effective range of these cartridges vary from 150 to 200 *m* and with the use of telescopic sights the range of fire may reach as much as 300—400 *m* and sometimes even more.

Shot cartridges are used for firing from smooth-bore rifles 12, 16, 20, 28 and 32 gauges. Cartridges 12, 16 and 20 gauges are turned out by the industry in paper shells of a standard size with colour marking and handsome decoration on the shell body. Cartridges of 28 and 32 gauges are not produced by the industry.

Shotgun cartridges are classified into cartridges with paper shells and „Жевело" primers and cartridges with paper shells and „Центробой" primers according to the type of primer used.

Shotgun cartridges are manufactured in conformity with All-Union State Standards and are filled with high-quality smokeless powder which retains its ballistic properties for a long time. They are used for professional and sport hunting and standshooting. All cartridges are made to fit chambers 70 or 65 *mm* long.

Apart from external inspection and templet measurement each lot of ready rifle or shotgun cartridges before its delivery to the customer is checked for fire accuracy, proper ballistic characteristics and flawless operation.

Given below is the information on hunting ammunition manufactured in the Soviet Union.

5.6-mm Hunting Cartridge with High Initial Velocity of Bullet

The cartridges are used for hunting medium-size animals. The killing effect of the cartridge is ensured at a range of up to 300 *m*.

The cartridges are fired from magazine and repeating carbines and combination guns.

BASIC CHARACTERISTICS

Calibre, *mm*	5.6
Cartridge case	bimetallic, grooved
Bullet velocity at a range of 25 *m*, *m/sec*	860—875
Mean powder pressure, *kg/sq.cm*	2,700
Powder	smokeless, pyroxyline, tubular
Bullet	soft nosed with lead core
Weight of bullet, g	3.5
Length of cartridge, *mm*	48.7
Weight of cartridge, g	11.3

The bullet has a great stopping effect and is capable of killing even large animals when hitting a vulnerable spot.

The cartridge has high and stable fire accuracy. In firing at a range of 100 *m* the dispersion diameter does not exceed 5.5 *cm*.

6.5 - mm Hunting Cartridge

The cartridge is used for firing from a combination gun with a rifled barrel for hunting small and medium-size animals at ranges of up to 200 *m*.

The bullet is of a soft-nosed type having great killing and stopping effect.

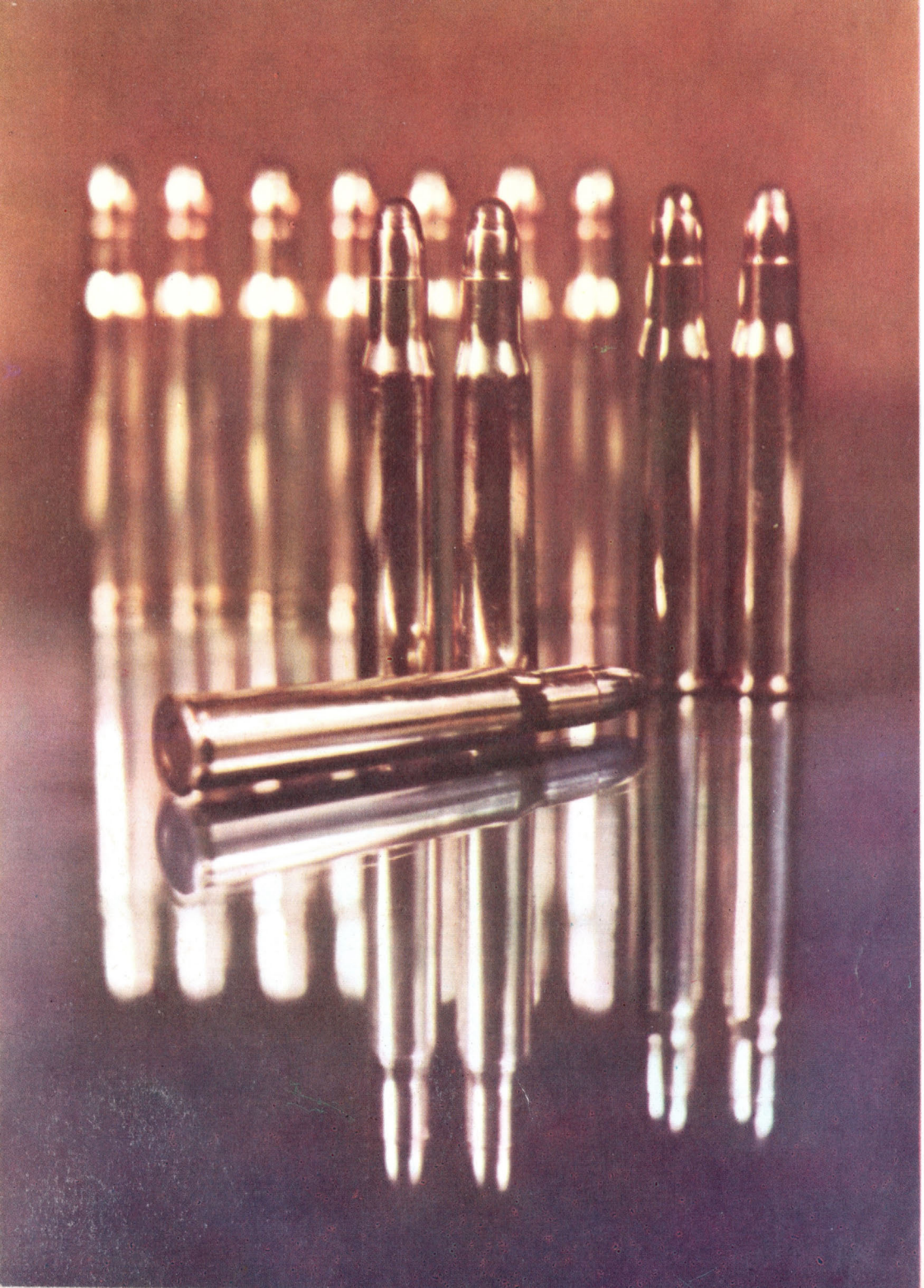
BASIC CHARACTERISTICS

Calibre, *mm*	6.5
Cartridge case	brass, flanged
Bullet velocity at a range of 25 *m*, *m/sec*	585—600
Mean powder pressure, *kg/sq.cm*	1,400
Powder	pyroxyline, porous
Bullet	soft-nosed with lead core
Weight of bullet, *g*	5.5
Length of cartridge, *mm*	52
Weight of cartridge, *g*	11

The cartridges have high accuracy of fire.

The dispersion diameter of bullets when firing at a range of 100 *m* does not exceed 6.0 *cm*.

This kind of ammunition may be used for obtaining saigas, wolves, gazelles, racccons, roes, lynxes, bustards, etc.



8.2 - mm Hunting Cartridge (Modified)

The cartridge with a soft-nosed bullet is modified to increase the initial velocity of bullet and is recommended for hunting medium-size and large animals at a range of up to 600 *m*.

It is employed for professional hunting for firing from hunting carbines at mountain goats, saigas, wild goats, deer and other animals.

As compared with a formerly produced 8.2 *mm* cartridge the modified cartridge has improved ballistic properties and higher stopping and killing effect of bullets.

BASIC CHARACTERISTICS

Calibre, *mm*	8.2
Cartridge case	brass, grooved
Bullet velocity at a range of 25 *m*, *m/sec*	610—625
Mean powder pressure, *kg/sq.cm.*	2,200
Powder	pyroxyline, porous
Bullet	soft-nosed with lead core
Weight of bullet, *g*	9.6
Length of cartridge, *mm*	78
Weight of cartridge, *g*	27

The dispersion diameter of bullets when firing at a range of 100 *m* does not exceed 14 *cm*.

9 - mm Hunting Cartridge

The cartridge is recommended for big game hunting at long ranges of 300—400 *m* and more.

The cartridge is used for firing from magazine and repeating carbines and from combination guns.

BASIC CHARACTERISTICS

Calibre, *mm*	9
Cartridge case	brass, flanged
Bullet velocity at a range of 25 *m*, *m/sec*	640—655
Mean powder pressure, *kg/sq.cm*	2,450
Powder	pyroxyline, grain
Bullet	soft-nosed, with lead core
Weight of bullet, *g*	15
Length of cartridge, *mm*	67
Weight of cartridge, *g*	29.0

The dispersion diameter of bullets when firing at a range of 100 *m* does not exceed 10 *cm*.

TABLE OF BASIC CHARACTERISTICS OF HUNTING CARTRIDGES

Type of cartridge	Calibre, *mm*	Bullet velocity at range of 25 *m*, *m/sec*	Mean powder pressure, *kg/sq·cm*	Length of cartridge, *mm*	Weight of cartridge, *g*	Weight of bullet, *g*	Type of bullet	Type of cartridge case	Mean dispersion diameter at range of 100 *m*, *cm*
5.6-*mm* hunting cartridge with high initial velocity of bullet	5.6	860—875	2,700	47.7—48.7	10.9—11.7	3.45—3.55	soft-nosed	bimetallic, grooved	5.5
6.5-*mm* hunting cartridge	6.5	585—600	1,400	51.0—52.0	10.63—11.25	5.40—5.6	ditto	brass, flanged	6.0
8.2-*mm* hunting cartridge (modified)	8.2	610—625	2,200	77.0—78.0	27.0	9.5—9.7	ditto	brass, grooved	12
9-*mm* hunting cartridge	9	640—655	2,450	65.8—67.0	26.8—29.04	14.9—15.1	ditto	brass, flanged	10

Shotgun Cartridges

Soviet ammunition factories produce shotgun cartridges of 12, 16, and 20 gauges. The cartridges are filled with lead shot from 1 to 5.0 *mm* in diameter. The shotgun cartridges are intended for professional and sport hunting.

Cartridge shells are made of paper and are fitted with brass-coated bases. If so desired, cartridge cases may be 70, 65 and 60 *mm* long.

The powder used is smokeless „Сокол" or some other brand.

Cartridges filled with „Сокол" powder charges are fitted with primer „Жевело" type.

For filling cartridges both felt and high-quality wood-fiber wads are used.

Type of beading — ordinary, circular or "Star-shaped".

The velocity of shot flight is 300 ± 10 *m/sec*.

Cartridges are packed in cardboard boxes, 10 or 25 cartridges in a box.

All shotgun cartridges have high accuracy and sharpness of fire and uniform pattern.

Approximate dosage of powder and shot in cartridges of various gauge is the following:

Gauge	„Сокол" powder charge, g	Shot charge, g
12	1.8—2.2	32—35
16	1.6—2.0	27—39
20	1.6—1.9	24

SPORTING CARTRIDGES

The present chapter of the catalogue contains information on various types of sporting cartridges manufactured in the Soviet Union. Depending on their use sporting cartridges of different calibres are produced.

The sporting ammunition may include rim-fire cartridges, central-fire cartridges and shotgun cartridges for trap-shooting. Rim-fire cartridges, calibre 5.6 *mm*, commonly known as small-calibre cartridges are used for practice and competitive shooting from sporting pistols and rifles at ranges up to 100 *m*.

Sporting cartridges with central-fire primers are also used for practice shooting and at competitions when firing from various types of weapons with a calibre from 5.6 to 7.62 *mm* at ranges up to 300 *m*.

Shotgun cartridges are used for firing from round or trench-type stands.

Sporting shotgun cartridges are turned out only in 12 gauge with paper cartridge shells and „Жевело" primer having non-oxidizing percussion compound. To make these cartridges high-quality lead shot, felt or felt grease-soaked wads and handsomely decorated cartridge shells of various colours are employed.

Sporting cartridges for rifled weapons have certain features of design which ensure permanently high accuracy of fire.

Sporting cartridges and their elements are made of the top grades of materials with the use of a technological process ensuring uniform manufacture of cartridges; the precision of manufacture is also achieved due to the application of minimum tolerances established for the basic linear and weight parameters of cartridges and their elements.

Proceeding from the requirements to various categories of sporting ammunition with regard to fire accuracy and ballistic characteristics they are classified into ordinary sporting, target and higher accuracy target cartridges. These cartridges may be used for firing from smooth-bore repeating shotguns and ordinary shotguns from a round or trench-type stand.

The types of sporting ammunition manufactured in the Soviet Union are determined by the training standard of sportsmen and their qualification. Sporting cartridges having better basic characteristics are more expensive due to the labour-consuming and precise processes involved in their manufacture, therefore they are used mainly by highly qualified sportsmen — participants of important contests. As a rule such ammunition is made on orders from customers in limited quantities, whereas mass production types are cheaper and they are intended for general usage.

Using Soviet-made sporting cartridges at international competitions, leading Soviet marksmen many times established new records and by the development of marksmanship the Soviet Union ranks among the first countries in he world.

Given below is the principal information on various types of sporting cartridges made in the Soviet Union.

5.6 - mm Target Small - Calibre Rim - Fire Cartridge

The cartridges are intended for use at All-Union and international competitions when firing from match rifles and pistols at a range of 100 *m*.

The following types of these cartridges are produced:

1. Target cartridge "Extra" having extremely high and stable fire accuracy. Used at important international competitions. Manufactured on orders from customers. Bullet having improved ballistic characteristics.

2. Target cartridge used for practice shooting. Quantity produced.

BASIC CHARACTERISTICS OF CARTRIDGES

Type of cartridge	Calibre, *mm*	Bullet velocity at a range of 25 *m*, *m/sec*	Mean powder pressure, *kg/sq·cm.*	Bullet	Powder brand	Percussion compound	Bullet weight, *g*	Cartridge length, *mm*	Cartridge weight, *g*	Dispersion diameter at 50-*m* range, *cm.*
5.6-*mm* target cartridge "Extra"	5.6	330—340	1,300	Lead, greased	Spherical	Non-oxidizing	2.6	25.5	3.41	mean-1.2 maximum-1.7
5.6-*mm* target cartridge	5.6	300—340	1,300	Lead, greased	Spherical	Non-oxidizing	2.6	25.5	3.56	mean-1.6 maximum-2.0

Using these cartridges for practice and competitive shooting, Soviet marksmen always won the first individual and team places.

5.6 - mm Pistol Target Rim - Fire Short Cartridge

The cartridges are used at All-Union and international contests for rapid pistol firing at silhouette targets at a range of 25 *m*.

The cartridge having high and stable fire accuracy is manufactured on orders from the customers.

BASIC CHARACTERISTICS

Calibre, *mm*	5.6
Bullet velocity at a range of 25 *m*, *m/sec*	210-240
Mean powder pressure, *kg/sq.cm*	400
Bullet	lead, greased
Powder brand	pyroxyline, fine grain, porous
Percussion compound	non-oxidizing
Weight of bullet, *g*	2.2
Length of cartridge, *mm*	18.8
Weight of cartridge, *g*	2.9

Dispersion diameter of bullets at a range of 25 *m* does not exceed 3 *cm*.

Soviet sportsmen use these cartridges with great success at important All-Union and international competitions, they always have won the first individual and team places. At the World Championships in 1954, 1958 and 1962 the teams of Soviet marksmen fired these cartridges and won the first places and the prize of Venezuela.

5.6 - mm Sport - Hunting Rim - Fire Cartridge with Steel Case

The cartridges are designed for practice shooting, competitions and for professional hunting of small animals and birds.

The cartridges are manufactured in two categories: *I* — with mean dispersion diameter of bullets not exceeding 3 *cm*; *II* — with mean dispersion diameter of bullets not more than 4 *cm*.

The cartridges of the *I* and *II* categories are mass production types.

BASIC CHARACTERISTICS

Calibre, *mm*	5.6
Bullet velocity at a range of 25 *m*, *m/sec*	310—340
Mean powder pressure, *kg/sq. cm.*	1,300
Bullet	lead, greased
Powder brand	spherical or fine grain, porous
Percussion compound	non-oxidizing
Weight of bullet, *g*	2.6
Length of cartridge, *mm*	25.5
Weight of cartridge, *g*	3.5

These cartridges are widely used by sportsmen and professional hunters.

5.6 - mm Cartridge for Firing at "Running Deer" Target

The cartridges are intended for sport shooting at rapidly moving target "Running Deer".

As compared with 7.62-*mm* sporting cartridges used for the same purpose, these cartridges produce weaker recoil and have higher bullet velocity which enables the shooter to deliver fire at the target without taking lead.

The cartridge has high and stable fire accuracy. The mean dispersion of bullets at a range of 100 *m* does not exceed 6 *cm*.

BASIC CHARACTERISTICS

Calibre, *mm*	5.6
Bullet velocity at a range of 25 *m*, *m/sec*	1,030—1,060
Mean powder pressure, *kg/sq.cm.*	2,900
Type of bullet	solid with lead core
Weight of bullet, *g*	2.8
Length of cartridge, *mm*	48.9
Weight of cartridge, *g*	11.5

These cartridges were successfully used at the World Shooting Championship in Cairo in 1962.

6.5 - mm Target Cartridge

These cartridges are intended for use at All-Union and international shooting competitions when firing at a range of 300 *m* and in the modern winter biathlon.

6.5-*mm* target cartridges ensure high accuracy of fire and weaker recoil as compared with 7.62-*mm* rifle cartridges, thus making shooting easier.

BASIC CHARACTERISTICS

Calibre, *mm*	6.5
Cartridge case	brass, flanged
Bullet velocity at a range of 25 *m*, *m/sec*	725—745
Mean powder pressure, *kg/sq.cm.*	2,900
Type of bullet	solid with lead core
Weight of bullet, *g*	9.9
Length of cartridge, *mm*	72.8
Weight of cartridge, *g*	22.3

Mean dispersion diameter of bullets at a range of 300 *m* does not exceed 10 *cm*.

6.5-*mm* target cartridges are used by Soviet marksmen at international competitions with great success.

7.62 - mm Target Rifle Cartridge

The cartridges are designed for use at important All-Union and international competitions when firing from free target rifles from three positions at a range of 300 *m*.

Two types of these cartridges are produced:

1. Target rifle cartridge "Extra" manufactured on orders from customers.

2. Target rifle cartridge — quantity production type.

Target cartridge "Extra" has a more perfect ballistic shape of the bullet and a higher accuracy of fire.

BASIC CHARACTERISTICS

	7.62-*mm* target rifle cartridge	7.62-*mm* target rifle cartridge "Extra"
Cartridge case	brass, flanged	brass, flanged
Bullet velocity at a range of 25 *m*, *m/sec*	740—755	735—750
Mean powder pressure, *kg/sq. cm.*	2,500	3,000
Type of bullet	solid with lead core	solid with lead core
Weight of bullet, *g*	11.8	13
Length of cartridge, *mm*	76.9	76
Weight of cartridge, *g*	25.3	26.5
Dispersion diameter at 300 *m* range, *cm*	not more than 16	not more than 9

In the past 10 years Soviet teams of marksmen using these cartridges at all international shooting competitions constantly won the first places.

149

7.62 - mm Revolver Sporting Cartridge

These cartridges are used at shooting competitions for firing from a revolver at a round target or silhouette at a range of 25 *m*.

The fire accuracy of a sporting cartridge is much higher than that of a formerly used revolver cartridge.

BASIC CHARACTERISTICS

Calibre, *mm*	7.62
Cartridge case	brass, flanged
Bullet velocity at a range of 10 *m*, *m/sec*	180—195
Bullet	lead
Weight of bullet, *g*	6.5
Length of cartridge, *mm*	38.7
Weight of cartridge, *g*	11.3
Dispersion diameter at 25-*m* range, *cm*	4

These cartridges were often used by Soviet marksmen at international competitions at which high results were scored.

TABLE OF BASIC CHARACTERISTICS OF SPORTING CARTRIDGES

Type of cartridge	Calibre, *mm*	Bullet velocity, *m/sec*	Mean powder pressure, *kg/sq. cm*	Length of cartridge, *mm*	Weight of cartridge, *g*	Type of bullet	Weight of bullet, *g*	Type of cartridge case	Bullets dispersion diameter, *cm*	Range, *m*
5.6-*mm* target cartridge "Extra"	5.6	300—340 at range of 12.5m	1,300	25.5	3.4	Lead, greased	2.6	Brass, flanged	1.2	50
5.6-*mm* target cartridge	5.6	300—340 at range of 12.5*m*	1,300	25.5	3.6	Ditto	2.6	Ditto	1.6	50
5.6-*mm* pistol target short rim fire cartridge	5.6	210—240 at range of 12.5*m*	400	18.8	2.9	„	2.2	Tompac, flanged	3.0	25
5.6-*mm* sport-hunting rim-fire cartridge with steel case	5.6	310—340 at range of 12.5*m*	1,300	25.5	3.5	„	2.6	Steel, flanged	4.0	50
5.6-*mm* cartridge for firing at "Running Deer" target	5.6	1,030—1,060 at range of 25*m*	2,900	48.9	11.5	Solid, with lead core	2.8	Bimetallic, grooved	6	100
6.5-*mm* target cartridge	6.5	725—745 at range of 25 *m*	2,900	72.8	22.3	Ditto	9.9	Brass, flanged	10	300
7.62-*mm* rifle cartridge	7.62	740—755 at range of 25 *m*	2,500	76.9	25.3	Solid, with lead core	11.8	Brass, flanged	16 (diameter)	300
7.62-*mm* rifle cartridge "Extra'	7.62	735—750 at range of 25 *m*	3,000	76	26.5	Ditto	13	Ditto	9	300
7.62-*mm* revolver sporting cartridge	7.62	180—195 at range of 10 *m*	—	38.7	11.3	Lead	6.5	„	4	25

„РЕКОРД“ 12 Gauge Cartridge for Trap - Shooting

The cartridge is used for shooting from a trench type stand.

Cartridge shell — paper, 70 *mm* long with steel brass-coated cap and cardboard sleeve.

Primer — „ЖЕВЕЛО“ type with mercuric fulminate or non-oxidizing percussion compound.

Powder brand — „СОКОЛ“.

Disc — cardboard, 1.5 *mm* thick.

Wads: main — felt, grease-soaked; auxiliary — lower, felt, non-greased, 5 *mm* high; upper, fine felt, 3 *mm* high.

Shot — hard, nickel-plated, 2.5 *mm* in diameter.

Weight of shot charge — 35 *g*.

Beading — "star-shaped".

Packing — in boxes containing 10 and 25 cartridges.

The cartridges have high velocity of shot flight, good fire accuracy and uniform pattern.

„СТАНДАРТ“ 12 Gauge Cartridge for Trap - Shooting

The cartridges are designed for practice shooting from a trench type stand.

Cartridge shell — paper, 70 *mm* long, with steel brass-coated cap.

Primer — „ЖЕВЕЛО“ type with mercuric fulminate or non-oxidizing percussion compound.

Powder brand — „СОКОЛ“.

Disc — cardboard, 1.5 *mm* thick.

Wads: felt, lower wad — grease-soaked, upper wad — non-greased.

Shot — hard, 2.5 *mm* in diameter.

Beading — "star-shaped".

Packing — in boxes containing 10 and 25 cartridges.

The cartridges have high velocity of shot flight (310—320 *m/sec*), good fire accuracy (at least 70%) and uniform pattern (at least 90%).

A similar „СТАНДАРТ II“ cartridge is produced for firing repeating shotguns from a trench type stand; this cartridge ensures higher velocity of shot flight (300—310 *m/sec*) and has circular beading of the cartridge shell.

„СТАРТ“ 12 Gauge Cartridge for Trap - Shooting

This cartridge is intended for trap-shooting on a round stand from a repeating shotgun.

Cartridge shell — paper, 65 or 70 *mm* long, with steel brass-coated cap and cardboard sleeve.

Primer—„ЖЕВЕЈО“ type with mercuric fulminate or non-oxidizing percussion compound.

Powder brand — „СОКОЈ“.

Discs — cardboard, 1 and 1.5 *mm* thick.

Wads: felt, lower wad — grease-soaked, upper wad — non-greased.

Shot — hard, 2 *mm* in diameter.

Weight of shot charge — 31.5 *g*.

Beading — circular.

Packing — in boxes containing 10 and 25 cartridges.

The cartridges have high velocity of shot flight (310—320 *m/sec*), good fire accuracy and uniform pattern.

„СПОРТ“ 12 Gauge Cartridge for Trap - Shooting

The cartridge is intended for trap-shooting on a trench type stand from a repeating shotgun.

Cartridge shell — paper, 65 or 70 *mm* long, with steel brass-coated cap and cardboard sleeve.

Primer — „ЖЕВЕЛО“ type with mercuric fulminate or non-oxidizing percussion compound.

Powder brand — „СОКОЛ“.

Discs — cardboard, 1.5 *mm* thick (to be placed on powder), fine felt (to be placed on wad).

Wads: main — felt, grease-soaked; auxiliary — felt, non-greased, 5 *mm* high.

Shot — hard, nickel-plated, 2.5 *mm* in diameter.

Weight of shot charge — 35 *g*.

Beading — circular.

Packing — in boxes containing 10 and 25 cartridges.

The cartridges have high velocity of shot flight, good fire accuracy and uniform pattern.

„ПРИЗ“ 12 Gauge Cartridge for Trap-Shooting

The cartridge is designed for trap-shooting on a round stand.

Cartridge shell — paper, 65 or 70 *mm* long, with steel brass-coated cap and cardboard sleeve.

Primer — „ЖЕВЕЛО“ type with mercuric fulminate or non-oxidizing percussion compound.

Powder brand — „СОКОЛ“.

Discs — cardboard, 1 or 1.5 *mm* thick.

Wads: felt, lower wad — grease-soaked, upper wad — non-greased.

Shot — hard, 2 *mm* in diameter.

Weight of shot charge — 31.5 *g*.

Beading — "star-shaped".

Packing — in boxes containing 25 and 10 cartridges.

The cartridges have velocity of shell flight (340±10 *m/sec*), good fire accuracy and uniform pattern.

The mean accuracy of fire is within 68—70%. The mean powder pressure in the barrel chamber during firing is 550—570 *kg/sq.cm.*, the maximum pressure being not higher then 625 *kg/sq.cm.*

Prizes Won by Soviet Marksmen at

◀ THE PRIZE OF SWITZERLAND

◀ THE PRIZE OF NACER

THE PRIZE OF VENEZUELA ▶

International Shooting Competitions

▲ THE KRÜGER PRIZE

THE PRIZE OF ARGENTINA ▼

◀ THE PRIZE OF HELSINKI

◀ THE CUP OF LYONS

Storage and Handling Instructions

Proper and careful handling of the weapon ensure its dependable operation throughout many years.

Rifled and smooth-bore weapons will remain serviceable and reliable in operation as long as the rules on assembly, disassembly, cleaning, storage at home, shipping, as well as handling during hunting and competitions are duly complied with.

These rules boil down to the following main points:

Keep the weapon either disassembled or assembled but always in a dry place.

To avoid the weakening of firing springs release hammers and firing pins before placing weapons in storage.

Always keep the weapon clean and slightly lubricated, paying special attention to the cleanliness and condition of lubrication of the bore.

See to it that the mechanisms are not clogged with dust or sand.

Protect the weapon, especially the barrel and sights, from dropping, shaking, sharp knocks and shocks.

When opening and closing the shotgun do not allow the barrels to drop loosely.

It is not advisable either to snap the barrels back sharply in closing the shotgun. In both cases support the barrels, opening or closing them smoothly and adjusting the movement of the top lever.

Do not release hammers or other mechanisms unnecessarily as this may result in the premature breakage of the firing and trigger mechanisms.

Prior to firing make sure that there are no foreign objects, snow, dirt, thick lubricant, etc. in the bore.

Do not use dirty or non-standard cartridges. Never fire cartridges with increased charges.

It is forbidden to fire both barrels at a time since the shotgun is not rated to withstand such a load.

Before firing in wet or frosty weather wipe the outer surface of the barrels and all the metal parts with waste soaked in mineral oil.

In winter lubricate the mechanisms with frost-resistant lubricant.

After firing wipe the weapon dry, clean the bores of fouling and lubricate them. Special care should be taken to wipe rifled bores.

In case of excessive fouling wash the bores with hot water and then wipe them several times with clean dry cloth. If after cleaning the barrel the cloth shows traces of lead or tompac, clean the bore again using a soft steel or copper wire brush liberally coated with gun grease.

During cleaning make sure that lubricant does not get and remain on wooden parts. Rifle oils, especially alkaline, affect wood, it becomes brittle and begins to crumble.

Before cleaning the weapon always disassemble it (remove barrels and forearm or action) and clean the bores from the breech end.

To clean the weapons use the following materials:

— clean, soft cleaning cloth;

— alkaline solvent ГОСТ 7281-54 for cleaning powder deposits;

— brushes to remove lead or tompac deposits;

— rifle oil for lubricating parts after cleaning;

— frost-resistant lubricant ЦИАТИМ-201 ГОСТ 6267-58 for lubricating parts in winter time.

During prolonged storage the weapon should be inspected, cleaned and lubricated at least once a month. Timely care of the weapon is a guarantee of its dependable operation and flawless action under various service conditions.

Send your requests and orders to:

V/O **"RAZNOEXPORT",** 5, *Kalyayevskaya St., Moscow, K-6, USSR*

Telegraph address: *Raznoexport, Moscow*

Telephone: *51-48-97*

Telex: *153*

CONTENTS

Contents

Introduction 3

HUNTING FIREARMS 7

ИЖ-17 Single-Barrel Shotgun 14
ИЖ-18 Single-Barrel Shotgun 16
МЦ20 Single-Barrel Magazine Shotgun 18
МЦ21 Repeating Shotgun 20
БМ Double-Barrel Shotgun 22
ТОЗ-25 Double-Barrel Shotgun 24
ИЖ-58 Double-Barrel Shotgun 26
ИЖ-54 Double-Barrel Shotgun 28
МЦ-10 Double-Barrel Shotgun 30
ИЖ-12 Double-Barrel Shotgun 32
МЦ6 Double-Barrel Shotgun 34
ТОЗ-16 Hunting Single-Shot Rifle 38
ТОЗ-17 Hunting Five-Shot Carbine 40
ТОЗ-21 Hunting Repeating Carbine 42
„БАРС-1" Hunting Carbine 44
„ЛОСЬ" Hunting Carbine 46
„МЕДВЕДЬ" Hunting Repeating Carbine 48
ИЖ-56-3 „БЕЛКА" Double-Barrel Combination Gun 52
ИЖ-15 Double-Barrel Combination Gun 54
МЦ29-03 Double-Barrel Combination Gun 57
МЦ5 Double-Barrel Combination Gun 58
ТОЗ-28 Three-Barrel Combination Gun 60
МЦ30-20 Three-Barrel Combination Gun 62

SPORTING WEAPONS 67

МЦ9 Double-Barrel Sporting Shotgun 72
ИЖ-54 „СПОРТ" Double-Barrel Sporting Shotgun 74
МЦ11 Double-Barrel Sporting Shotgun 76
МЦ8-2 Double-Barrel Sporting Shotgun 78
ТОЗ-8М Sporting Rifle 82
ТОЗ-12 Sporting Rifle 84
СМ-2 Sporting Rifle 86
МЦ12-3 Sporting Match Rifle 88
МЦ12 Sporting Match Rifle 90
„СТРЕЛА-3" Sporting Match Rifle 92
„СТРЕЛА-2" Sporting Match Rifle 94
БК-2 Sporting Rifle 96
МБО-1 Sporting Rifle 99
МЦ80-1 Sporting Rifle 100
„ЗЕНИТ-4" Sporting Match Rifle 102
МЦ13-2 Sporting Match Rifle 104
„ЗЕНИТ-3" Sporting Match Rifle 106
„БИАТЛОН" (БИ-7.62) Sporting Rifle 108
МЦУ Match Auto-Loading Pistol 110
МЦ1-2 Match Auto-Loading Pistol 112
ИЖ-1 Match Single-Shot Pistol 114
МЦ2-3 Match Single-Shot Pistol 116
МЦ55-1 Match Single-Shot Pistol 118
ТОЗ-35 Match Single-Shot Pistol 120
МЦ100-2 Sporting Gas-Cylinder Pistol 122
МЦ110-2 Sporting Air Rifle 124
МЦ110-1 Sporting Gas-Cylinder Rifle 127

HUNTING CARTRIDGES 131

5.6-*mm* Hunting Cartridge with High Initial Velocity of Bullet 134
6.5-*mm* Hunting Cartridge 135
8.2-*mm* Hunting Cartridge (Modified) 136
9-*mm* Hunting Cartridge 137
Shotgun Cartridges 139

SPORTING CARTRIDGES 141

5.6-*mm* Target Small-Calibre Rim-Fire Cartridge.... 143
5.6-*mm* Pistol Target Rim-Fire Short Cartridge..... 144
5.6-*mm* Sport-Hunting Rim-Fire Cartridge with Steel Case 145
5.6-*mm* Cartridge for Firing at "Running Deer" Target 146
6.5-*mm* Target Cartridge 147
7.62-*mm* Target Rifle Cartridge 148
7.62-*mm* Revolver Sporting Cartridge 149
„РЕКОРД" 12 Gauge Cartridge for Trap-Shooting .. 151
„СТАНДАРТ" 12 Gauge Cartridge for Trap-Shooting 152
„СТАРТ" 12 Gauge Cartridge for Trap-Shooting 153
„СПОРТ" 12 Gauge Cartridge for Trap-Shooting.... 154
„ПРИЗ" 12 Gauge Cartridge for Trap-Shooting 155

STORAGE AND HANDLING INSTRUCTIONS 160

CHANGES MADE IN THE CATALOGUE "SPORTING AND HUNTING WEAPONS AND CARTRIDGES"

Page	Line	Printed	To be read
18	6th from the bottom	2.2—2.4	2.2—2.6
32	4th from the bottom	3.1—3.3	3.1—3.2
36	1st from the bottom (6th column from the left)	675	750
54	2nd from the top	upper	lower
54	5th from the top	upper	lower
114	9th from the top	7—112	7—100
136	7th from the top	up to 600	up to 200
139	7th from the bottom	300±10	not less than 300
144	12th from the top	400	900
150	7th from the bottom (4th column from the left)	400	900
151	6th from the top	70	60; 65 and 70
152	2nd and 1st from the bottom	300—310	300—320
152	3d from the bottom	repeating	sporting and hunting
152	7th and 6th from the bottom	310—320	310—330
153	2nd from the bottom	310—320	310—330
155	1st from the bottom	625	600
155	6th from the bottom	340± 10	330± 10

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